



Jamestown High School  
Course Selection Guide  
2011-12

# **Jamestown High School**

## **Mission Statement**

The mission of Jamestown High School, in partnership with the community, is to graduate all of our students with positive attitudes, habits and skills that promote the growth of well-balanced individuals, prepared to pursue their goals in society.

### **Beliefs**

- Critical thinking, problem solving and communication are essential skills of learning.
- Global participation requires understanding of our rich human heritage and interdependence of nations.
- Each student is responsible for his/her own education, supported by the full commitment of school, family and society.
- Learning takes place best in a safe environment in which there are high expectations, positive attitudes, personal accountability and the opportunity for success.
- Each student is able to set and achieve his/her highest goals. “Let each become all he is capable of becoming.”
- Learning is a life-long process leading to success in an ever-changing world.
- Everyone has moral, social and legal rights with corresponding responsibilities. Thinking with the moral conscience and contributing back to the community form character, which is the first aim of education.

# Course Selection Guide

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## Jamestown High School Diploma Requirements

	REGENTS DIPLOMA		ADVANCED REGENTS DIPLOMA		ACADEMIC ADVANCED REGENTS DIPLOMA (e)	
	<i>Credits</i>	<i>Exams</i>	<i>Credits</i>	<i>Exams</i>	<i>Credits</i>	<i>Exams</i>
<b>English Language Arts</b>	4	English	4	English	4	English
<b>Social Studies</b>	4	Global History US History	4	Global History US History	4	Global History US History
<b>Math (a)</b>	3	Integrated Algebra	3	Integrated Algebra Geometry Algebra 2/Trig	4 (d)	Integrated Algebra Geometry Algebra 2/Trig
<b>Science (a)</b>	3	Biology <b>OR</b> Earth Science	3	Biology Earth Science	3	Biology Earth Science Chemistry/Physics
<b>Additional Core</b>					2	
<b>LOTE (b)</b>	1		3 (c)	Spanish/French (c)	3 (c)	Spanish/French (c)
<b>PE</b>	2		2		2	
<b>Health</b>	1		1		1	
<b>The Arts</b>	1		1		1	
<b>Career Exploration</b>	1		1		1	
<b>Elective Courses</b>	2		2		3	
<b>TOTAL</b>	<b>22</b>	<b>5*</b>	<b>24</b>	<b>9</b>	<b>28</b>	<b>9</b>

- (a) A commencement-level course in technology education may be used as the third unit of credit in science or math, but not both.
- (b) A student who has a disability which adversely affects the ability to learn a language may be exempt from LOTE requirements if the student's IEP states that such requirements are not appropriate.
- (c) Students seeking an Advanced Diploma must either complete three units of credit in LOTE with the corresponding Regents exam **OR** a sequence of not less than 5 units of credit in CTE or the Arts.
- (d) Students seeking the Academic diploma must complete pre-calculus or calculus for the fourth math credit.
- (e) Student seeking the Academic diploma must complete a minimum of 3 AP courses and the related exams.

\* *Students with disabilities may meet requirements for a local diploma by earning a minimum score of 55 on all required Regents exams. Students with disabilities who fail one or more Regents exams may also substitute a passing score on the corresponding Regents Competency Test (RCT) to meet local diploma requirements.*



# English Department

To fulfill New York State graduation requirements, all students must successfully complete four units of English and pass the English Language Arts Regents examination. In addition to the required four units of study, students may take additional English courses as elective credits.

## 9<sup>th</sup> Grade Courses

### English 9 Regents

English 9 Regents explores genres of literature with an intense study of representational works including drama, short stories, poetry, digital media, informational texts, nonfiction, and novels. Students will complete reading, writing, listening, and speaking tasks and focus on basic skills of grammar, vocabulary, and usage as well as interpretation and analysis.

### English 9 AT (Academically Talented)

English 9 AT is a challenging, fast-paced course, which provides the foundation for the advanced AT/AP program. The course is intended for self-motivated, intellectually curious, college-bound students and focuses on building interpretive, literary, and critical thinking skills through extensive reading, writing, and oral assignments.

### English 9 Video Works

Video Works is a two-year sequenced program for students in grades 9 and 10. The class focuses on both English Language Arts and Media Literacy. Motivated and creative students will produce rich media projects that require the integration of both English and technology skills. Video Works is a hands-on workshop environment that requires intense student thought and involvement. Students produce meaningful projects with considerable emphasis placed on teamwork and communication skills, preparing them for post high school success. This course meets the entire school year. Students earn two credits per year: one credit in English and one credit in Technology. *(See additional course description for the Videography Program listed under the Technology Department.)*

## 10<sup>th</sup> Grade Courses

### English 10 Regents

English 10 Regents explores world and multicultural literature with a strong focus on analysis and interpretation. Units on freedom, tolerance, and diversity will expose students to various genres. Students will complete reading, writing, listening, and speaking tasks. Basic skills such as grammar, vocabulary, usage, and research will be taught through fiction and non-fiction. In addition to improving basic skills, this course aims to heighten awareness and promote tolerance of different cultural perspectives. Overall, the course seeks to augment college and career readiness.

### English 10 AT (Academically Talented)

English 10 AT is a continuation of 9AT with a focus on the canon of World Literature, as well as contemporary multicultural works. Its purpose is to develop skills to interpret literature and advance critical thinking. These skills will be practiced in reading, writing, speaking, and listening tasks.

### English 10 Video Works

Video Works 10 is a continuation of Video Works 9. Please see description for English 9 Video Works.

## 11<sup>th</sup> Grade Courses

### English 11 Regents

English 11 Regents emphasizes the study of American literature. An intense study of representational works including drama, short story, poetry, novel, essay, and other works of nonfiction will be combined with an emphasis on language and composition skills. The English Language Arts Regents exam is administered at the completion of the course.

### English 11 AT (Academically Talented) - College Composition I (JCC English 1510 – 3 college credits)

English 11 AT adds College Composition I, a three-credit JCC course that teaches students to write precise, clear, substantive essays in a variety of rhetorical modes, to the English 11 Regents curriculum – American Literature. Students will take a JCC final in addition to the English Language Arts Regents exam. Emphasis will be placed on critical thinking, reading, and writing.

*A prerequisite to the course is a score of 4+ on the JCC Placement exam Accuplacer Writeplacer and an 80+ on the Reading Test or advanced academic standing. Students who do not meet the prerequisites for this course may enroll but will not be eligible for college credit.*

### English 11 AP (Advanced Placement) - Language and Composition (JCC English 1530 – 3 college credits)

English 11 AP is a year-long course that builds upon the skills developed in English 9AT and English 10AT. This three-credit college course includes an in-depth study of American literature, and serves to prepare students for the English Language Arts Regents examination. The second part of the course prepares students for the national Advanced Placement Language and Composition examination.

*A prerequisite to the course is a score of 7+ on the JCC Placement exam Accuplacer Writeplacer and an 80+ on the Reading Test or advanced academic standing. Students who do not meet the prerequisites for this course may enroll but will not be eligible for college credit.*

### English 11 Video Works

The third year of Video Works builds upon the foundations of Video Works 9/10. The class focuses on both English language arts and media literacy. Motivated and creative students produce rich media projects that require the integration of both English and technology skills, including independent and group projects. The year culminates with production of installation art. Students will also take the English Language Arts Regents exam.

### English 11 Youth Apprenticeship Program (Y.A.P.)

Upon successful completion of an application and interview process, students are placed in Y.A.P. English. This course focuses on developing students' language arts skills to meet the needs of the modern workplace. Students will master reading, writing, research, and public speaking in preparation for higher education and professional employment. This course is taught in conjunction with other Y.A.P. classes and includes out of school activities.

## 12<sup>th</sup> Grade Courses

All English 12 students choose one of the following courses, which contain a research project and culminate in a departmental final exam. Not all courses are offered every year. Please see the Guidance Course Selection Sheet for availability.

### **English 12 – Language and Composition, British Literature**

This course offers intense instruction in reading, writing, listening, and speaking skills for students who need to improve developing competencies. Students will study representational works in various genres: poetry, short story, novel, and drama.

### **English 12 – Comedy in Literature**

Comedy in Literature examines the idea of humor and its influence on modern society by exploring the history of comedy across various cultures and time periods. The course focuses on works from the classical period through modern Internet and television satire and includes texts from Greek, British, Irish, and American authors, such as Aristophanes, Shakespeare, Wilde, and Twain. Students will trace the history of Western comedy, examine the idea of the comedy in society as expressed in literature, compare the similarities and differences in what is considered humorous across various cultures, and explore the influence of comedy in modern literature, culture, and film.

### **English 12 – Sports Literature**

The world of sports in American culture has an undeniably important status. This course will examine the place of sports in society. Students will read and respond to a wide variety of poetry and prose having aspects of sport as its subject. Students will read about individual and shared victories, failures, and conflict.

### **English 12 - Mystery**

Everybody knows “the Butler did it!” This course is designed to expose students to the genre of mystery story throughout history and in different cultures. Students will develop analytical and critical thinking skills through reading and application. They will also determine the elements that contribute to mystery and crime fiction, identify stylistic application of literary elements by a wide range of authors, trace the patterns and examine stereotypes in this genre, conduct research for creative process application, and write their own Who Dun It?

### **English 12 – Beasts in Books**

In this course, students will explore the multifaceted nature of man’s relationship to the natural world and animals. Analysis of animals’ roles in literature from many cultures and time periods will lead to a better understanding of humankind. Students will read a variety of fiction and non-fiction material about the relationship between man and beast, develop deeper understanding of symbolism, examine author’s audience, purpose, and tone, identify figurative language, conduct research for creative process application, and analyze the appeal of animal tales.

### **English 12 – Banned Books**

This course examines controversial works and censorship controversies through exploration of language and its effect. Each unit of study will include a study of the language use in each piece and how it contributes to the banning of the text.

### **English 12 – Mythology**

Myths, the expression of the subconscious of our species, are often seen as enactments of our hopes and fears in vivid, universally understood symbols. They are also full of striking events and characters, and, as such, have outer meaning as exciting stories as well as inner meaning, which define who we are and what we value. This course will provide a clearer understanding of how myths are the basis of much literature. Students will concentrate on myths as the “narrative form of a society’s soul,” as Joseph Campbell defines it. Students will study classic myths and folktales, their influence on other disciplines, and their relationship to the modern world.

## **English 12 – Monsters in Literature**

The monster archetype has been used throughout literature to explain the unknown, warn of the dangers of behavior outside the norm, and represent evil to society's good, to name just a few of its roles. The focus of the course is to examine the idea of the monstrous and its influence on modern society by exploring the common elements of "the monster" across various cultures and time periods. Students will focus on society's relationship with monsters—real or imagined, physical or psychological—throughout history.

## **English 12 – Riddles to Rap - Poetry Workshop**

This course will explore the development of poetic forms, principles, and practice providing opportunities for analysis and creativity. Students will explore the form, language, and meaning of poetry. Students will read and explicate different poetic forms, discuss alternative meanings, analyze structure and poetic elements, relate the works to life experiences. Students will also evaluate song lyrics as poetic expression. Students will identify poetic terms and forms, trace the evolution of poetry, memorize poems, research a poet of choice, write a variety of poems, and criticize and accept critical appraisals of their work.

## **English 12 – Sports Journalism**

This course stresses the practical necessity of the journalism fundamentals of reporting, researching, interviewing, and ethics. It demonstrates through examples how to transform information into accurate articles. By examining works from famed authors, students will examine how sports journalism influences and reflects our society and culture. This course will enhance students' writing, reporting, interviewing, and editing skills. Students will examine audience, purpose, and tone, explore how sports reporting reflects societal issues, write and research objective sports related articles, and publish writings in a variety of modes.

## **English 12 - Irish Literature**

Irish writing has been torn between the need to define a national identity in opposition to Britain and the desire to transcend national boundaries and embrace a cosmopolitan modernity. Students will examine the history of Irish literature, analyze the author's purpose for choosing literary techniques, thoroughly explore the established language of selected works, and examine the cultural, historical, political and social impact of the theme.

## **English 12 – Science Fiction/Fantasy**

This course examines the history, mythology, and modern applications of science fiction and science fantasy. Students will cover earlier works by Verne, Wells, and Tolkien, as well as more current works by Asimov, Card, Clarke, and Jordan. In addition to reading and critical writing, the course will include a unit on writing science fiction/fantasy.

## **English 12 – Research**

We now live in the information age. The mastery of information, analysis, synthesis, and all research tools is essential to academic and career success. Students will master traditional and Internet research tools, learn a variety of research methods, match methods and tools to tasks, master MLA formats, read critically, develop decision-making skills, learn how to process rough data into a final product, and present their findings in an oral presentation.

## **English 12 - The Short Story**

This course offers an intensive and extensive reading of short stories and focuses on units that include pre-reading activities, options for text reading, comprehension checks, discussion of literary issues, discussion circles, and activities such as panel presentations, dialogue writing, debate, and special writing assignments.

## **English 12 - Literature of War**

This course will analyze and synthesize of ideas related to human conflict. Students will evaluate the impact of literature on the popular perception of war, analyze the use of literature as propaganda and protest during times of war, understand the function of archetypes in the literature of war, develop an understanding of the complex nature of war and conflict, explore language and its effect, and consider audience.

## **English 12 - Media and Communication**

This course combines media studies with written and oral forms of communication. In order to become informed consumers of media, students will analyze the intent, strategy, language, and medium of media in a variety of forms such as film, television, newscasts, newspapers, and magazines. Students will be expected to communicate effectively through informative and persuasive presentations in both, but not limited to, oral and electronic platforms.

## **English 12 - Youth Apprenticeship Program (Y.A.P.)**

The second year of Y.A.P. is a continuation of Y.A.P. 11. Please see description for Y.A.P. 11.

## **English 12 - Art Born of Art (JCC Public Speaking 1610 – 3 college credits)**

Art Born of Art combines an historical survey of the art of Western civilization with an examination of poetic responses to visual images and grants three JCC Public Speaking credits. Students will deliver individual speeches in a variety of modes as they determine the extent to which one art form inspires another by viewing paintings, prints, sculpture, and films and by reading related poetry, prose, and critical essays. By exploring the relationships between the written word and visual images, students will gain a deeper appreciation of language through study and understanding of related art. Students will also learn effective strategies for researching, preparing, and delivering informal, informative, and persuasive speeches.

*A prerequisite to the course is a score of 4+ on the JCC Placement exam Accuplacer Writeplacer and an 80+ on the Reading Test or advanced academic standing. Students who do not meet the prerequisites for this course may enroll but will not be eligible for college credit. Attendance, both as a speaker and as an audience member, is critical in this class.*

## **English 12 College Level - College Composition and Introduction to Literature (JCC English 1530/1540 - 6 college credits)**

College Level English 12 combines two units of intensive writing, close reading, oral presentation, and critical analysis. In College Composition (1530), students will analyze, synthesize, and evaluate information through research and writing. Students will study methods of written and visual argumentation, write essays and documented position papers on current issues, research and write an analytical paper utilizing MLA documentation and complete a JCC departmental final exam.

In Introduction to Literature (1540), students will analyze a variety of readings in different genres, experiment with various methods of critical analysis, and create and deliver oral presentations. Students must pass the first unit (1530) in order to be eligible for the second (1540).

*A prerequisite to the course is a score of 7+ on JCC Placement exam Accuplacer Writeplacer and an 80+ on the Reading Test or advanced academic standing. Students must pass the first unit (JCC 1530) in order to be eligible for the second (JCC1540). Students who do not meet the prerequisites for this course may enroll but will not be eligible for college credit.*

## **English 12 AP (Advanced Placement) – Literature and Composition (JCC English 1540 – 3 college credits)**

An intensive study of drama, short story, novel, poetry, and essay will be combined with an emphasis on literary analysis and composition skill development. This college-credit course prepares students for the national Advanced Placement Literature and Composition examination.

*Successful completion of JCC 1530 is required for JCC 1540 eligibility. Students who do not meet the prerequisites for this course may enroll but will not be eligible for college credit.*

## English Electives

### Creative Expressions

Independent and group projects form integral parts of this non-traditional atmosphere for the motivated, self-directed, and creative student. Students will be exposed to non-canonical narratives and will respond to the narratives through creative mediums such as art, film, poetry, and prose.

### Drama I

Drama I offers an introduction to theater, acting, and public speaking. Based on the Stanislavski method of acting, students become familiarized with in-depth character studies via units in imagination, concentration, vocalization, and physicality. Drama I provides an introduction to drama as a performing art, with emphasis upon creative writing, physical movement, and the use of voice in the development of characters. While developing self-confidence, the students will perform skits, poems, scenes and one act plays. In addition, students will gain experience in teamwork, vocal articulation, blocking, basic costuming, lighting, sound and the artful use of the stage.

### College Theater

*(JCC Introduction to Theater 1510 – 3 college credits)*

Students will obtain an understanding and appreciation of theatre from early ritual through post-war American drama. Plays are viewed, performed in class and read collaboratively as well as independently. Students will discuss a variety of dramatic forms, approaches and techniques. Acting styles and the elements of costuming, makeup, scenic design, and the lighting necessary to stage a show are also examined. Performance skills are strengthened through acting exercises and methods.

*A prerequisite to the course is a score of 4+ on the JCC Placement exam Accuplacer Writeplacer and an 80+ on the Reading Test or advanced academic standing. Students who do not meet the prerequisites for this course may enroll but will not be eligible for college credit. Attendance, both as a speaker and as an audience member, is critical in this class.*

### Public Speaking

*(JCC Communication 1610 – 3 college credits)*

Public Speaking is a performance driven course that fosters the development of purposeful and well-planned oral communication – Students will learn effective strategies for researching, preparing, and delivering informal, informative, and persuasive spoken presentations to small groups in a safe forum. Students will be able to demonstrate the methods for supporting points with evidence, analyzing the audience, building confidence, and refining their delivery style. Students will have the opportunity to speak in different venues, evaluate themselves and their classmates, and critique speakers outside of class. Speeches include demonstration/process speeches, narratives, improvisation, recitation, informational presentations, and persuasive calls to action. Within this classroom community, students gain confidence, as well as group interaction skills.

*A prerequisite to the course is a score of 4+ on the JCC Placement exam Accuplacer Writeplacer and an 80+ on the Reading Test or advanced academic standing. Students who do not meet the prerequisites for this course may enroll but will not be eligible for college credit. Attendance, both as a speaker and as an audience member, is critical in this class.*

### Women's Issues/Women's Voices

Women's Issues is offered to upperclassmen who are interested in learning about and analyzing issues facing women. This course will "hear" from real women and fictional characters in literature who voice and reflect important gender-related issues. The major part of the course will focus on late twentieth century women and the issues that vaulted women into the twenty-first century. Texts will include literature, music, video, periodicals, and defining court decisions.

### Radio/Broadcasting I

Radio Broadcasting I explores an evolving genre of technology-driven communication that stimulates the mind and senses. It is information art with skills, techniques, and concepts including: audio, visual art, performance art, conceptual art and design, writing and editing, and presentation.

# English as a Second Language

The ESL program is funded through a grant from New York State. It is a program that teaches English (reading, writing, listening, and speaking) to students who have a native language other than English. The grant covers the first three years of the students' English language instruction and may be renewed for an additional three years if the student does not achieve a satisfactory score on a reading test. The purpose of ESL is to teach students English, help them acclimate, and help them to have success in all academic studies.

New York's Commissioner's Regulations Part 154 require that students be enrolled in an ESL program if they have a first language other than English **and** score below the fluency level on the test of oral English **and** have an English reading score of less than the 40th percentile on a nationally normed test.

Part 154 Regulations also recommend that a beginning ESL high school age student be enrolled in the equivalent of 3 class periods per day of ESL instruction. An intermediate ESL student should be enrolled in 2 ESL class periods per day, while an advanced student would receive 1 class period of ESL per day.

## ESL Program and Courses

Three ESL courses are offered at JHS, with students placed according to their English language skill development. ESL students receive English credits through ESL. The ESL teacher assists students by attempting to include content area concepts in the ESL curriculum, where feasible. The ESL teacher is also a resource for content area teachers who need strategies for teaching English Language Learners.

### ESL Beginner

This course is for the beginning ESL students who speak/understand virtually no English. It is designed to teach school survival skills (school and class rules, procedures, where important places are in the school, etc.). This course also teaches very basic English language skills, using reading, writing, speaking, and listening.

### ESL Intermediate

This course is for intermediate level ESL students, generally students who have been here more than one year (an intermediate level student can usually speak and be understood in English, although the English may sound broken and/or choppy). The course provides more reading/writing instruction at higher levels, as well as preparing students in all grade-appropriate English Language Arts.

### ESL Advanced

This course is designed for higher level ESL students. It uses previously taught skills and builds upon them to put into practice the various ELA elements needed to be successful on the ELA Regents. The students are grouped as necessary to meet individual and instructional needs. The course is thematic in its approach incorporating subject matter from content-area classes.

### ESL/ELA Connections

This class is designed for all ESL students who also need to take the New York State Regents examination in ELA. All ESL students in 11<sup>th</sup> and 12<sup>th</sup> grade who still need to take the ELA for graduation requirements should be enrolled in this class.



# Social Studies Department

## Global History & Geography

These courses utilize a chronological format that is organized around themes and concepts rather than world regions. The course focuses on the 4 NYS Social Studies Standards - Geography, History, Economics, & Government – and how common themes recur across time and place. The course is formatted into 8 historical eras. Students are required to take the NYS Regents Global History Exam at the end of Global History 2.

### Global History 1 (Grade 9)

- Introduction to Global History
- The Ancient World & Religion (4,000 BC- 5,000 AD)
- Expanding Zones of Exchange and Encounter (500-1200)
- Global Interactions (1200-1650)
- First Global Age (1450-1770)

### Global History 2 (Grade 10)

- Age of Revolution (1750-1914)
- A Half-Century of Crisis & Achievement (1900-1945)
- The 20<sup>th</sup> Century Since 1945
- Global Connections & Interaction

## United States History & Government

### US History & Government (Grade 11)

The course involves a chronological/conceptual study of American History that begins with the settlement of the United States and culminates with current issues in America. It is designed to provide students with a more in depth study of US History & Government than they received in Middle School by examining social/economic/political issues, foreign policy, technology/inventions, and their impact on Americans and the world. The course emphasizes critical thinking, research, and analysis of history by incorporating primary sources, text, media, current events, etc. Instruction and writing of Thematic and Document Based Essays are included in this course. Upon completion of the course, students take the NYS Regents US History & Government Exam.

### AP American History – Advanced Placement

This is a challenging Level 5 Honors Course that begins with the American Colonial Era and continues chronologically through the American Revolution & US Constitution, and culminates with current issues in modern America. Special emphasis in this course includes: Analysis of American Government, Constitutional Amendments, Landmark US Supreme Court Cases, Reform Movements in America, the Impact of Immigration, Industrial & Technological Developments, Economic Policies, Major Themes of American Foreign Policy, and the United States in the Global Community Today. Students taking this course will take the Advanced Placement (AP) US History Exam in addition to the New York State Regents exam in US History & Government.

*Special Requirements: Document Based Question Essay Responses involving primary source materials are required throughout the course. A major term paper on US History & Government is also required to earn credit in this course. This course offers possible college credit to qualifying students.*

## College Level US History I & II – Distance Learning

*Eligible students may earn up to six credits through Jamestown Community College.*

These courses are designed for students who have not completed AP American History, but have been very successful in the traditional NYS Regents US History & Government course. Students who truly enjoy history will build upon their present knowledge through an analytical, writing intensive and primary source/research driven course. This is an exciting opportunity for students and the instructor, as students already know the facts of US History, thus allowing the class to delve deeper into historical data such as: Majority and Minority Supreme Court Case Arguments, Literary Works, Biographical Data, and Specialty Issues such as the Spanish Flu Pandemic. These courses are taught in the JHS Distance Learning Lab utilizing computer and video technology to link together 6 Chautauqua County school districts allowing for live video conferencing instruction and interaction.

*Prerequisite: Successful completion of the NYS Regents US History & Government Exam and course is required. Students must also pass the required JCC Placement Examination.*

## Government & Economics

### Government & Economics

The government portion of this course is designed primarily for grade 12 students. The course emphasizes the interaction between citizens and government at all levels by encouraging students to participate in political opportunities, (such as attendance at city/county meetings), and relate them to the course. Exploration of key civic values, analysis of *current* government issues and the connection to the national/global context, study of the political process, and study of how to be an informed citizen are developed in this course. The primary goal is preparing students to become effective participants in the democratic process.

The economics portion of this course is designed primarily for grade 12 students. The course curriculum is developed from the nationally recognized twenty-two (22) concepts adopted by the National Council of Economic Education. The focus involves units in fundamental concepts of both microeconomics and macroeconomics. Class activities include the study of *current* economic issues and exploration of the relationship between these and past economic policies, practices, principles, and events.

### Government & Economics/Radio/Broadcasting II

This course will allow students to earn their NYS required graduation credits for Government and Economics. The course will explore these topics and students will demonstrate mastery of the current and historical issues of government and economics via a variety of media formats such as radio, film, web design, pod-casting, vod-casting, journalism, etc.

The course is designed to attract those students pursuing a Media Arts major at JHS and those who are interested in a more engaging hands-on project/portfolio based program. Students will be responsible for mastering the same standards of the more traditional government and economics course. Students will work individually and in teams to complete projects. *Space is limited.*

## Advanced & Elective Courses

### Philosophy

This introductory course to philosophy covers the history, themes, and conflicts surrounding different world-views and systems of beliefs. Current events and issues are used to illustrate how philosophy affects world events. Artificial Intelligence, faith vs. reason, designer babies, and the ethics of war all involve the debate of philosophical reasoning. In this course students will investigate philosophy through debate, discussion, reading, and essay writing.

## **Psychology**

*Prerequisite: Enrollment limited to students in grades 11 or 12.*

General Psychology serves as a one semester introductory course to the study of psychology. Through a variety of approaches and interactive activities, students will learn about the fundamentals of human behavior. Topics covered in General Psychology include: Schools of Psychology, Learning Development, Personality, Parapsychology, and Abnormal Psychology. In addition to class discussions, readings, and activities, students will conduct research experiments in a laboratory setting.

### **Advanced Placement (AP) Psychology**

This course involves a more intense study of human behavior than General Psychology. Students will pursue more in-depth investigation of the: Schools of Psychology, Learning Development, Personality, Parapsychology, Ethics, and Abnormal Psychology. The course is demanding and requires a great deal of reading as well as exploration of concepts through activities, articles, film, review of studies, writing, research, and class discussion. Students will conduct experiments in/out of the laboratory setting, and draw conclusions based on this and their study of the course.

*Students in this course will take the AP Psychology Exam.*

### **Advanced Placement (AP) European History**

This course examines the intellectual, cultural, political, social, and economic development of Europe from the Renaissance to the present. Students will study differing ideas about the role of the individual in society, the relationship between individuals and the State, and the relationships between countries as well as competing economic and social theories. In addition to providing a basic narrative of events and movements, the goals of the AP European History course are to develop:

- An understanding of the principal themes of modern European History
- An ability to analyze historical evidence
- An ability to analyze and express historical understanding in writing an discussion

This class will require substantial reading, writing, and research. Active class participation is essential to the successful completion of this course.

*Students taking this course will take the Advanced Placement (AP) European History Exam.*

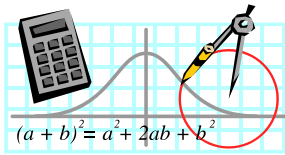
### **Local Government**

This course explores local government from the city/county/and state perspective in light of national and global issues/events. Students are expected to actively attend local government opportunities and integrate this into their class discussion and writing. Students will investigate local issues and solutions through the use of public surveys, reading of articles, and examination of the news. This course requires students to remain informed about what is going on locally in the economy, political arena, and social concerns.

### **History of Warfare**

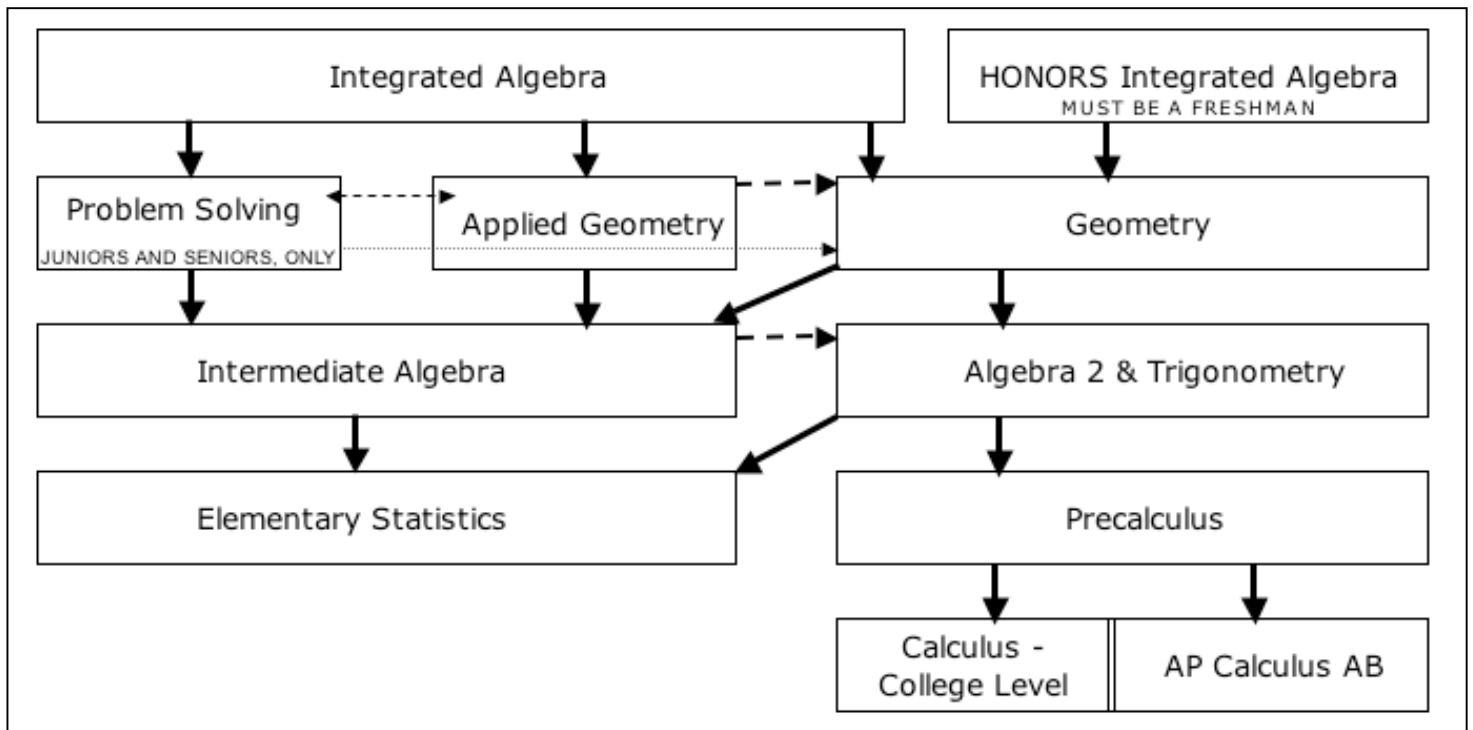
This course explores the history of war in western society. War has been a part of life since beginning of human history and it is very much an issue today that is critical for students to understand. This course will shed light into the nature of why wars are fought, why they end, and what the short-term/long-term results have been. The focus of the class will be on weapons, tactics, strategies, technological improvements and how all of these impacted the soldiers/citizens of the time and beyond. The course will also examine World War 2 in greater detail than the US History & Government course. Readings, documentaries, films, and discussion/writing will be used for instruction. This course involves intense study of war and is very demanding of students. If you liked history, then this course may be for you.





# Math Department

## JHS Mathematics Department Course Sequence Effective September 2010



*See the following pages for course descriptions and prerequisites.*

## Beginning Mathematics

### Integrated Algebra

This two-credit course is a graduation requirement for all students seeking a Regents or Advanced Regents diploma. The course will assist students in developing skills and processes to be applied using a variety of techniques to successfully solve problems in a variety of settings. Students will study the connections between various types of equations and their geometric representations using coordinate geometry. Additional topics of study include measurement, right triangle trigonometry, elementary probability theory, and an introduction to data analysis.

*Students will take the **NYS Integrated Algebra Regents** exam upon completion of the course. Graphing calculators are highly recommended.*

### Honors - Integrated Algebra

*Prerequisite: Only freshmen can be enrolled in this course. A minimum grade 8 math final average of 90 is recommended*

This **one**-credit course is intended for students that are seeking an Advanced Regents diploma and who wish to accelerate their completion of algebra in one semester. The course will assist students in developing skills and processes to be applied using a variety of techniques to successfully solve problems in a variety of settings. Students will study the connections between various types of equations and their geometric representations using coordinate geometry. Additional topics of study include measurement, right triangle trigonometry, elementary probability theory, and an introduction to data analysis.

*Students will take the **NYS Integrated Algebra Regents** exam upon completion of the course. Graphing calculators are highly recommended.*

### Algebra 1A/1B

*Prerequisite: Final average of 55 or higher on first attempt at Integrated Algebra or one credit in high school algebra or pre-algebra from previous school district.*

This credit recovery course is intended for students who have previously attempted Integrated Algebra but who need additional preparation to successfully complete the course or pass the **NYS Integrated Algebra Regents** exam. Students may be granted credit for Algebra 1A upon successful completion of Algebra 1B.

### Applied Geometry

*Prerequisite: Credit for Integrated Algebra and a passing score on the Math A or Integrated Algebra Regents exam*

This course is intended for students seeking a Regents diploma and who wish to continue their formal study of mathematics in preparation for college or technical school. Students will have an opportunity to further develop their math skills while exploring geometry as applied to art, technical drawing, and physical settings. Successful completion of this course will provide students with a third unit of credit in mathematics, required for the Regents diploma.

## Geometry

*Prerequisite: Credit for Integrated Algebra and passing Regents exam score; minimum course average of 75 recommended.*

This is the second mathematics course for students who are pursuing an Advanced Regents Diploma. Students will have the opportunity to make conjectures about geometric situations and prove in a variety of ways, both formal and informal, that their conclusion follows logically from their hypothesis. Students will justify geometric relationships and properties of geometric figures, including congruence and similarity of triangles as well as properties of triangles, quadrilaterals, and circles. An integrated review of algebra topics will be incorporated throughout the course of study.

*Students will take the NYS **Geometry Regents** examination upon completion of the course. Graphing calculators are highly recommended.*

## AT Geometry

*Prerequisite: Credit for AT Algebra I and passing Regents exam score; minimum course average of 80 recommended*

This course is recommended for students who are pursuing an Academic Advanced Regents Diploma and who accelerated their study of mathematics in middle school. This course provides more extensive and rigorous treatment of all topics studied in Geometry, in preparation for the advanced mathematics courses that follow.

*Students will take the NYS **Geometry Regents** examination upon completion of the course. Graphing calculators are highly recommended.*

## Intermediate & Advanced Mathematics

### Problem Solving with Mathematics

*Prerequisite: Credit for Integrated Algebra and a passing score on the Integrated Algebra Regents exam.*

*Requirements:*

- *This course is designed for juniors and seniors.*
- *Prior to taking the course a student must complete the Jamestown Community College placement test, Accuplacer. Minimum scores of 80-Reading and 57-Math must be earned to be eligible for JCC college credit.*

Students will develop problem-solving skills through a detailed study of specific problem-solving strategies such as drawing diagrams, making systematic lists, looking for patterns, identifying sub-problems and working backwards. Solution presentation and communication are emphasized. Successful completion of this course will provide students with a third unit of credit in mathematics, required for the Regents diploma. Upon successful completion of this course students who meet the eligibility requirements will earn 3 college credits from Jamestown Community College.

### Intermediate Algebra

*Prerequisite: Credit for Geometry or Applied Geometry or Problem Solving*

This course is intended for students seeking Regents or Advanced Regents diploma and who wish to continue their formal study of mathematics in preparation for college or technical school. Students will continue their study of algebra as they study various families of functions using polynomials, radicals, absolute values, and exponentials. Algebra and graphing skills will be the main focus of the course.

*Students will take a **local final** examination upon completion of the course. Graphing calculators are highly recommended.*

## Algebra 2 & Trigonometry

*Prerequisite: Credit for Geometry or AT Geometry, minimum course average of 75 recommended*

This is the third mathematics course for students seeking an Advanced Regents diploma. Students will extend and develop the algebraic techniques that will be required for continued study of mathematics, while also developing alternative solution strategies and algorithms. The families of functions to be studied will include polynomial, absolute value, radical, trigonometric, exponential, and logarithmic functions. Problems resulting in systems of equations will be solved graphically and algebraically. Right triangle trigonometry will be expanded to include the investigation of circular functions. Problem situations requiring the use of trigonometric equations and identities will also be investigated. Data analysis will be extended to include measures of dispersion and the analysis of regression that model functions studied throughout this course. Additional topics of study include arithmetic and geometric sequences, advanced study of probability theory, and the complex number system.

*Students will take the NYS Algebra 2/Trigonometry Regents examination upon completion of the course. Graphing calculators are required.*

## AT Algebra 2 & Trigonometry

*Prerequisite: Credit for AT Geometry, minimum course average of 80 recommended*

This is recommended as the third mathematics course for students seeking an Academic Advanced Regents diploma. This course provides more extensive and rigorous treatment of all topics studied in Algebra 2 & Trigonometry, in preparation for the advanced mathematics courses that follow.

*Students will take the NYS Algebra 2/Trigonometry Regents examination upon completion of the course. Graphing calculators are required.*

## College Preparatory Mathematics

### Elementary Statistics (elective)

*Prerequisite: Credit for Intermediate Algebra or Algebra 2/Trigonometry*

*Requirements:*

- *Student must be a junior or senior*
- *Jamestown Community College – College Connections eligibility requirements apply*

This elective course is intended for students who wish to further their mathematical study in preparation for college degree program requirements. It is particularly recommended for students considering a degree in the social sciences. Students will study various topics in both descriptive and inferential statistics including measures of central tendency and spread, graphical analysis of data, probability, random sampling, correlation and regression, hypothesis testing and confidence intervals. Practical applications are emphasized throughout the course. A significant part of the course is taught in a laboratory setting using a software package such as minitab. Graphing calculators are required.

*Students will take a **final examination** upon completion of the course. Upon successful completion of this course **and final examination**, eligible students will earn 3 college credits from Jamestown Community College (MAT1540).*

## Precalculus

*Prerequisite: Credit for Algebra 2 & Trigonometry and Regents exam; minimum course average of 75 recommended*

This course is intended for students who are seeking an Academic Advanced Regents diploma and who wish to prepare for the study of mathematics at the college level. Material from previous mathematics courses will be extended and further developed as students begin to examine the theoretical basis for algebra and trigonometry. Students will study graphs of functions, equation theory, analytic geometry, and limits.

*Students will take a **local final** examination upon completion of the course. Graphing calculators are required.*

## AT Precalculus

*Prerequisite: Credit for AT Algebra 2 & Trigonometry, minimum course average of 80 recommended*

This course is intended for students who are seeking an Academic Advanced Regents diploma and who wish to take AP Calculus prior to high school graduation. This course provides more extensive and rigorous treatment of all topics studied in Precalculus, in preparation for AP Calculus. Students will take a **local final** examination upon completion of the course. Graphing calculators are required.

## Calculus – College Level

*Prerequisite: Credit for Precalculus. Jamestown Community College – College Connections requirements also apply.*

Students will study the fundamental concepts of calculus. Topics include an introduction to analytic geometry, functions, limits and continuity, and derivatives and integrals and their applications. An approved graphing calculator is required. A computer algebra system such as *Mathematica* is incorporated into the course to meet the lab requirements. Students will take a **JCC final examination** upon completion of the course. Upon successful completion of this course and **JCC final examination**, students will earn 4 college credits from Jamestown Community College.

## Advanced Placement (AP) Calculus

*Prerequisite: Credit for AT Precalculus, minimum course average of 80 recommended*

This rigorous college-level course provides students the opportunity to receive college credit while in high school, pending approval by the college of choice. Calculus is the branch of mathematics that studies the rate of change of a function and its application to business, science, and engineering. Students are prepared for the **College Board Advanced Placement Calculus AB examination**. Students will also take a **local final** examination upon completion of the course. Graphing calculators are required. Students will take a **JCC final examination** within this course. Upon successful completion of this course and **JCC final examination**, students will earn 4 college credits from Jamestown Community College.



# Science Department

## Regents Science Courses

### Earth Science

This is a full-year laboratory course of study that will prepare students for the Regents examination. By handling materials and doing experiments, the successful student will learn to identify rocks, minerals and fossils, stars and planets, will develop a basic understanding of major theories that explain weather, earthquakes, volcanoes, and the history of the Earth. The student is required to work with various pieces of scientific equipment. There is an emphasis on accurate measurements. Field trips will be planned to local points of interests.

### Biology

This full year course prepares students to take the Regents exam. Instructions are based on a series of lab investigations and class activities. The students will design experiments, collect data, and interpret their results. Upon completing the course, the successful student will have developed a basic working knowledge of the biological basis to problems in medicine, public health, agriculture and conservation. Seven key ideas will be studied:

- Living things are similar to and different from each other and from non-living things.
- Organisms inherit generic information in a variety of ways that result in continuity of structure and function between parent and offspring.
- Individual organisms and species change over time.
- The continuity of life is sustained through reproduction and development.
- Organisms maintain a dynamic equilibrium that sustains life.
- Plants and animals depend on each other and their physical environment.
- Human decisions and activities have had a profound effect on the physical and living worlds.

### Chemistry

This is a full-year college preparatory course of study leading to a Regents exam. It differs from Applied Chemistry by requiring a stronger background in math. Students should have had or be currently registered in Geometry or Intermediate Algebra. Topics include atomic structure, bonding properties of the elements, states of matter, energy in chemical reactions, nuclear science, solutions, acid-base theory, electro-chemistry, and organic compounds. Emphasis is placed on developing precise laboratory techniques.

*Course requirement: Currently registered in Geometry/Intermediate Algebra or higher and passed both Earth Science and Biology Regents Exam.*

### Physics

Regents Physics is a lab oriented science course based on the New York State Core Curriculum. Students will study mechanics, energy, electromagnetism, waves, and modern physics. Other areas may include motion in a plane, internal energy, electromagnetic applications, geometrical optics, solid state physics, and nuclear energy. The New York State Regents High School Examination in Physics is the final examination for the course.

*Suggested prerequisites include Regents Chemistry and concurrent enrollment in Intermediate Algebra or Algebra II/Trigonometry.*

## Applied and Elective Courses

### Current Topics in Life Science

This upper-level elective is designed as a life science alternative for students having passed Regents Biology and Regents Earth Science. Subjects that may be covered in this semester-long class may include: environmental science, medicine, microbiology, forensic science, genetics, and other current life science events. A focus will be on reading and discussing current scientific literature and students will be required to give several presentations about various topics.

### Environmental Science

This is a program of study centered on man and his interaction with the environment. Topics will include the study of the earth, ecological interactions, biomes, global ecosystems, energy resources, and managing human impact. This course is designed for non-science majors to get some experience with both living environment and the physical setting.

### Physical Geology

Physical Geology is a ½ year science elective offered for students who enjoy science and would like to participate in a “hands on” type of learning experience. This class will help fulfill the science graduation requirements. Geology class will include daily walking field trips, an all day field trip to Lake Erie and Chautauqua Lake, as well as fun class activities and lab work.

### Applied Chemistry

This course leads to a local examination. It provides a broad overview of principles of chemistry, but it differs from Regents Chemistry by placing greater emphasis on daily applications of chemistry. The course strengthens student awareness of issues through the study of Chemistry. Continuous lab activities and projects are required.

### Conceptual Physics

Conceptual Physics is a one-semester course that covers many of the same topics as Regents Physics but is designed for non-science majors. The aim of the class is to expose the students to the world of physics around them. The content of the class will emphasize labs and activities. Suggested prerequisites for this class are the completion of at least two other sciences.

## Advanced Placement Courses

### Advanced Placement (AP) Biology

The College Board as a part of its Advanced Placement Program develops this course. It is a lab-based course designed to be the equivalent to a college introductory biology course usually taken by biology majors. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. The 3 general top areas covered include Molecules and Cells, Heredity and Evolution, and Organism and Population. Upon completion of the course, students take the **AP Biology Exam** and perhaps qualify to earn college credit while in high school.

*Prerequisites: Enrollment is limited to seniors only unless special permission is obtained from the instructor. Students must have Regents credit for Earth Science, Biology, and Chemistry, with scores of 85 or higher on at least two of three science Regents examinations.*

## **Advanced Placement (AP) Chemistry**

Course content is designed for science/engineering majors who wish to transfer to a 4-year institution. This course is the equivalent of first year college chemistry, with lab work taught on site. Students will investigate concepts surrounding atomic structure, bonding, stoichiometry, nuclear and organic chemistry. Students will take the Advanced Placement exam in May, and their score will determine how many college credits they are granted. Usually one year (3 to 4 credits) of college credit is awarded for scores of 4 or 5 (out of 5).

*Prerequisite: Pass Regents Exam in Chemistry, teacher recommendation, completed or currently enrolled in Algebra II/Trigonometry.*

## **College Chemistry 1 & 2 (JCC Chemistry 1550 & Chemistry 1560)**

Course content is designed for science/engineering majors who wish to transfer to a 4-year institution. In CHEM 1550, students will investigate the concepts surrounding atomic structure, bonding, stoichiometry, chemical reactions and phases of matter. In CHEM 1560, students will investigate the concepts surrounding kinetics, equilibrium, acids/bases, electrochemistry, nuclear and organic chemistry. This is the exact same course taught on the JCC Campus. Students must enroll in an evening lab section taught either on Tuesday, Wednesday or Thursday evening at JCC. The fall lab will begin the last week in August, before school starts. Successful completion of the lecture and lab will receive 4 college credits for CHEM 1550 and 4 additional credits for CHEM 1560.

*Prerequisite: Pass Regents exam in chemistry, teacher recommendation, completed or currently enrolled in Algebra II/Trigonometry, and must pass the JCC placement test. Students must pass CHEM 1550 to enroll in CHEM 1560. Students will be responsible for the college lab fee and the cost of one credit hour per semester as determined by JCC. The class portion (6 of 8 credits) is free to JHS students.*

## **Advanced Placement (AP) Physics C: Mechanics**

AP Physics C is a yearlong course equivalent to a first semester calculus-based engineering physics in college. Topics of AP C will include kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. College credit is based on the score earned on the AP exam. This course best suits students planning to enroll in college programs in science intensive courses of study (ex. medical, computers, science, architecture or engineering, etc.)

*Pre- or Co-requisites: Students must have successfully completed Regents courses in Chemistry and/or Physics, with examination scores of 85 or higher on the related Regents examinations. Students must have passed or be concurrently enrolled in either Precalculus or Calculus.*

## **Advanced Placement (AP) Environmental Science**

The course is designed to assist students in identifying natural and human-induced environmental problems while investigating solutions to alleviate or prevent these issues. The College Board, as a part of the Advance Placement Program, develops this course. Hands-on experiments focus on population ecology, land use, water quality, energy resources, and global change. Students will take the Advanced Placement exam in May and qualify for college credit based on achieved scores.

*Prerequisites: Integrated Algebra, Biology, Earth Science, and Regents Chemistry (or currently enrolled in Regents Chemistry). Students must have maintained a "B" average or better in all four courses.*



# World Languages Department

Foreign language study is advisable for students who plan to attend a two or four-year college, receive vocational or technical training, or develop skills which will enhance their life experiences through travel, communication, or knowledge of other cultures.

Students who enroll in a two or four-year college, vocational, or technical training school are those most successful in our sequential language programs. Upon completion of the program, students will have a basis in the language studies. Most of our students who complete the sequence (levels IV and V) receive up to six (6) college credits that are transferable to many colleges and universities in and outside of New York State.

The choice of the language is a personal matter. Each language will offer the possibility of travel, enhance business opportunities, and double the student's cultural world. Each will make a subsequent language easier to learn.

## Spanish Language Program

### Spanish I

*Required for all grade 9 students who do not meet the criteria for acceleration into Spanish II or Spanish IIAT.  
Recommended for students scoring below 85 on the grade 8 proficiency exam.*

This course is developed to further expand upon the basic concepts of verb conjugation, use of adjectives and listening comprehension taught in middle school. Students will solidify their understanding of the present tense, increase vocabulary development, writing and grammar skills and oral proficiency within the target language. Teachers will use communicative exercises, informal expressions and activities to ensure the student is able to understand Spanish in basic settings.

### Spanish II

*Prerequisite: Available to students upon successful completion of Spanish I. Grade 9 students may be allowed accelerated placement with teacher recommendation and a passing score on the grade 8 proficiency exam.*

Designed to move students to higher levels of language development. Students in this class will have had a strong foundation in basic grammar and speaking skills that will prove necessary to be successful in this course. Students will begin using more complex grammar concepts such as appropriate uses for various forms of present, past and future tenses, direct and indirect object pronouns and more complex writing. Students will increase oral and listening skills through dialogues, oral presentations and interaction with native speakers. Reading comprehension skills will be supported through the increased use of level appropriate literature (poetry, short stories, newspapers). Music, everyday life, culture, history, and expressions are part of the program.

### Spanish II AT

*Prerequisite: Intended for Grade 9 students who score 85 or higher on the grade 8 proficiency exam. Students who have completed Spanish I may also be enrolled with teacher recommendation.*

This course addresses the same content skills developed in Spanish II but a more rigorous pace. Students in this class will continue to learn new grammar and writing content an increased emphasis on conversation and will be expected to demonstrate these skills a higher level of initiative and independence. Students in this course will also be provided with introductory exposure to content delivered in Spanish III such as uses of the imperfect, subjunctive and passive voice.

### **Spanish III**

Students will spend significant amount of time refining skills developed in previous courses and applying them to new situations including social, professional, informational and cultural settings. New grammatical points of this level include the correct use of the present subjunctive and conditional tenses as well as demonstrate appropriate application of various tenses learned thus far. The student shall communicate with a certain level fluency and spontaneity and is able to initiate conversation and respond to a variety of situations in the target language.

### **Spanish IV**

This intermediate college-level course will develop students' communicative literacy and writing skills in Spanish. There will be a review of basic complex grammatical and pronunciation patterns, intensive vocabulary expansion through literary and non-literary reading, and extensive conversation practice. At the end of this course, students should demonstrate 50% proficiency or better in these identified areas.

### **Spanish V**

This course is a continuation of the skills and topics addressed in Spanish IV. There will be a review of a basic complex grammatical and pronunciation patterns, intensive vocabulary expansion through literary and non-literary reading, and extensive conversation practice. At the end of this course, students should demonstrate a 65% proficiency in their communicative, literary and writing skills.

*Students will be scheduled to take the College Level Examination (CLEP) in Spanish upon completion of the course. A satisfactory score on the CLEP examination may enable the student to be awarded from 3 to 12 college credits at the college of their choice.*

## **French Language Program**

### **French I**

This course intensifies into a one-year course the basics of material covered in a one or two year middle school program. Every effort is made to develop the speaking and listening skills, which will lead to a successful experience. Past experience indicates that those French and Spanish students who cover the material in the middle schools usually have superior listening and speaking skills because they have had more class time to practice.

### **French II**

The student will acquire skills to speak and to understand simple conversations dealing with general topics. Time will be devoted to dialogues and exercises that will increase the students' ability to communicate and to understand the spoken and written language. Knowledge of the structure of the language will increase greatly as the class progresses. Simple readings and directed writings will be a part of class work. The students also enjoy events, foreign food, speakers and audiovisual aids that contribute to the cultural appreciation of areas studied.

### **French III**

A student who wants to develop usable language skills needs a minimum of three years of language study. As the course progresses, the student is able to express his or her own ideas with the minimum of help from the teacher. He or she will understand the language spoken at a normal rate of speed and will improve writing skills greatly. Conversations become less structured and include everyday useful expressions, which will enable students to converse with native speakers. Cultural awareness is emphasized through readings and discussions.

# Physical Education Department

Physical education classes address the following New York State learning standards:

## **Standard 1 Personal Health and Fitness**

*Students will have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity, and maintain personal health.*

## **Standard 2 A Safe and Healthy Environment**

*Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.*

## **Standard 3 Resource Management**

*Students will understand and be able to manage their personal and community resources.*

Each year, students are required to complete a fitness, team, individual and aquatics activity. In addition, improving “health related fitness” is a priority in every activity. A variety of activities will be offered in each of these areas, as listed below. This variety is offered to help students attain the commencement level for Standard 1, which requires that students attain competency in a variety of activities and proficiency in a few select complex motor and sports activities. The combination of a comfort level of skill in physical activity and understanding of how to improve health related fitness is to prepare students for lifelong wellness.

Student fitness levels will be assessed each fall and spring in Physical Education classes. The purpose of assessing is to encourage students in the pursuit of “health related fitness”. The assessments used will be from several nationally recognized programs, including Fitnessgram and President’s Challenge. For some test items, the Tri-fit will be used, which is the latest technology in fitness assessment. Students will be encouraged to plan for improvement of their fitness levels to achieve a level in the Healthy Fitness Zone or higher, depending on individual goals. Heart Rate Monitors will be used in some Physical Education classes to help students exercise in their Target Heart Rate Zone, which is the most efficient way to achieve cardiovascular fitness.

**The following fitness activities are available to students in physical education classes:**

- Aquatics\*
- Basketball
- Soccer
- Team Games
- Wellness Center
- Recreational games
- Ice Skating
- Archery
- Golf
- Lacrosse
- Softball
- Volleyball
- Football
- Snowshoeing
- Rollerblading
- Dance

*\*Every student must take Aquatics each year.*

## **Required Participation**

Physical Education is a state-required course needed by all students for graduation. Each student is required to participate on a regular basis. If a student has medical limitations, he/she is considered for entry into the adapted program, can remain in the regular program with adaptations, or complete written assignments if unable to participate on any level. This program is tailored to the individual limitations of the student as directed by the student's physician.

Students with excessive absences will fall under the attendance policy and will not receive credit for graduation.

Students must be prepared for Physical Education with the appropriate clothing: sneakers, shorts, sweatpants, t-shirts, sweatshirts and swimsuit for aquatics. Credit is not given to those students unprepared to participate. Students may arrange to make up missed classes during an activity period, or before or after school in a scheduled time mutually agreed upon between student and teacher.

Due to scheduling issues, some students are scheduled into PE for one semester, every other day. The Commissioner's Regulation states that students must be active all year. Students will be scheduled into a PE activity if their schedules allow. In other cases, students will develop a plan of activity for the semester.

## **Knowledge and Skill Development**

Evaluation will consist of a combination of the following assessments dependent on the activity being evaluated. Performance on skills tests as well as paper/pencil tests will be used. The development of fitness plans; the accurate reporting of data, logs, etc, may also be a part of the assessment.

## Physical Education Electives

### American Red Cross Lifeguard Training

*Prerequisite: Must be 15 years old and able to*

- *Swim 500 yards continuously, using these strokes in the following order:*
- *200 yards of front crawl using rhythmic breathing and a stabilizing, propellant kick*
- *100 yards of breaststroke*
- *Swim 20 yards using either front crawl using rhythmic breathing or breaststroke. These 200 yards may be a mixture of front crawl and breaststroke.*
- *Swim 20 yards using front crawl or breaststroke, surface dive to depth 7 to 10 feet, retrieve a 10-pound object, return to surface, and swim 20 yards back to the starting point with the object. When returning to the starting point, the candidate must: hold the ten pound object with both hands and keep his/her face above the water.*

The purpose of this elective course is to provide the student with the practical and written skills to become certified Red Cross Lifeguards, which also includes CPR for the professional rescuer and first aid.

#### Course content includes

- The Professional Lifeguard
- Interacting with the Public
- Your place in Facility Operations
- Preventing Aquatic Injury
- Patron and Facility Surveillance
- Being Prepared for Emergencies
- CPR for the Professional Rescuer
- Surveillance and Rescue Skills
- First Aid from Injuries and Sudden Illness
- Preventing Disease Transmission
- Spinal Injury Management
- After an Emergency

#### Course Exit Requirements:

- Correctly answer at least 80% of the questions in each of the four sections
- Successfully complete three final skill scenarios
- Successfully perform all critical skills

There will be written and practical tests in the class besides the Red Cross tests. Homework will be assigned.

*Note: Students must purchase a CPR mask for about \$15 and \$8 for each certificate upon passing if they want their certificates. This is a substantial savings for the course since the community course costs \$120 or more.*



# Health Department

Health is required for graduation. The curriculum used in all grade levels at Jamestown High School is Teenage Health Teaching Modules. The program is nationally recognized and has been researched and validated. A perfect match for the New York State and National Health Standards, THTM is a comprehensive secondary school health education curriculum.

The following essential health skills are highlighted in each of the modules:

- Relationship management
- Risk assessment
- Self-assessment
- Communication
- Decision-making
- Planning & goal setting
- Health advocacy
- Self-management
- Stress management

THTM encourages students to meet the challenge of building positive, new skills, while developing a sensible understanding of and respect for potential dangers. Throughout THTM students are urged to help one another adopt health-enhancing behaviors and seek additional support when appropriate from family, friends, trusted adults, and professional caregivers.

Additionally, because of their significant relationship to health decisions and health behaviors, the themes of protection, responsibility, and interdependence are reinforced in all of the modules.

## Health Electives

### Intro to Health Careers

This course is designed for students interested in any of the fields of health care sector. Students will look at personality traits, which make one better suited for a career choice in the health care field. Trends of health care, where we've headed. Guest speakers will be brought in to discuss what a day on the job is like. What was the worst thing that ever happened to them? What is average salary? Students will also research the Dept. of Labor regarding health careers and compose a final paper on health career of choice.



# Art Department

Following the New York State standards, the JHS Art Program will prepare students for advanced study in the field of art. Art majors will develop and improve art-making skills to produce a portfolio of work for college admission. In addition to the career-interested students, there are numerous opportunities for non-art students to enrich their high school experience with art elective classes.

## **Recommended Art Sequences for Art Majors**

### **Fine Arts Major:**

Studio in Art 1 or 2

Drawing and Painting

Advanced Art

AP Art or Senior Art Workshop

*Further Art Electives should be taken to the extent possible*

### **Media Arts Major:**

Studio In Art 1 or 2

Intro To Computer Art

Computer Graphics and Media

Photography (Digital or Film)

Animation

*Further Art Electives should be taken to the extent possible*

## **Prerequisite Courses**

Students must complete and pass either one of these two classes to enroll in the art electives.

### **Studio In Art 1**

This course is focused on the introduction of basic art techniques, elements and principles of art, and links to art history and various art movements through drawing, painting, sculpture, design, computer graphics, and sculpture. This course fulfills the New York State Art/Music requirement.

### **Studio In Art 2**

This foundation class is designed to prepare students for success in the advanced art program. The content of the course deals with experiences in drawing, painting, graphics, 3D work, and commercial art: development of compositional skills and techniques important in producing art, and the appreciation of art through the study of works by the great masters both past and present. Students interested in art should be recommended to enroll in this course as a ninth grader based on recommendation by the middle school art teachers.

## **Art Electives**

### **Cartooning**

This drawing course will focus on improving students' cartooning techniques. Students will first learn basic cartooning techniques and then focus on different cartooning styles. Students will also be introduced to animation through a computer graphics program. Students are encouraged to develop and improve upon their personal cartooning style throughout the entire course

## **Studio in Crafts**

Through creative problem solving, students will create projects using contemporary craft materials. Besides creating artwork, students will learn to display and sell their work. Projects include wire jewelry, candle making, polymer clay designs, scrap booking, and altered books.

## **Computer Graphics/Media Communications**

*This class does not require art prerequisites if used as a technology credit.*

This course will introduce students to vector and raster based graphics design through the use of computer graphics programs such as Adobe “Illustrator” and “Photoshop” and other applications. There will be an integration of computer graphic imagery for print and web use. Projects will be conducted as client driven examples and will include the design of the following: logo, business and greeting cards, poster, tee shirt, 3-D packaging, CD cover, scanning, using a digital camera, burning optical media, file transferring and formatting. General computer and peripheral operating skills will be learned in addition to design projects.

## **Intro to Computer Art**

This course is designed to let the student explore the art possibilities using various computer graphics programs such as Adobe “Photoshop” and Adobe “Illustrator” Students will create graphic design projects using a mouse or drawing pen and learn how to manipulate digital images into creative artworks. Students do not need a lot of prior computer art experience, as this course is an introduction to the medium of computer graphics. Projects include sports logos, video game covers, movie posters, postage stamps, tee shirt designs, and more.

## **Studio in Photography (Traditional Film/Darkroom)**

This course is designed to encourage students to use the camera creatively, to consider photography as art as well as a technical operation, and as a hobby. Although, the student must become familiar with the technical aspects, the emphasis remains as photography as an art form. Students will learn the techniques of black and white photography and be introduced to digital photography. *Students are responsible to supply their own camera. Where adjustable SLR cameras are required, they will be furnished on a sign-out basis.*

## **Studio in Advanced Photography**

*Students must have successfully completed and passed “Studio in Photography” to enroll in this course.*

This course is designed to familiarize students with more complex techniques and processes. Students will also be expected to function on a much higher level of competency than in Photography. The students will learn such darkroom techniques as double exposures, Kodalith, hand-coloring black and white prints and more. Color slide work may be explored also. *Students are responsible to supply their own camera.*

## **Studio in Digital Photography**

This course will provide experience and practice using digital cameras and photo editing software. Students will learn fundamental photography skills such as understanding exposure and shooting modes, ISO, aperture/shutter speed relationships, focal length differences, depth of field, and composition. In addition, we will concentrate on the digital workflow and solutions to organizing and archiving bitmap images. Printing the fine art print, manipulations using Adobe Photoshop, and use of storage media and media devices, studio equipment, HDRI, image stitching, and collage will all be covered. Students must have use of their own digital camera for the majority of assignments. Some school-owned cameras may be signed out on an as-needed basis with parental permission to cover any loss or damages to equipment. *Prerequisite: Studio In Art 1 or 2*

## **Studio In Animation**

Animation utilizes a rapidly flashing sequence of 2-D or 3-D images to create the illusion of movement. Using digital cameras, computers, animation software, traditional art materials, scanners, printers, and studio lighting; students will learn visual storytelling using animation as an art medium. Students enrolled in this course will cover the history of animation, survey classic and contemporary animation, compare/contrast traditional film vs. digital filmmaking, practice writing effective storylines, and produce movie shorts using a variety of styles such as: Cut Paper, Rotoscoping, Traditional Cell, Stop-Motion, and Computer Generated animation. Students will work both individually and in small groups. *Prerequisite: Studio Art and one other art or visual technology course, or, instructor approval.*

## **Drawing & Painting**

*Students must have passed Studio in Art II or received special endorsement from an art teacher to enroll in this course.*

The focus of this course is to refine the drawing and painting techniques learned in Studio in Art I or II. A variety of drawing and painting media are used including graphite and colored pencils, pastels, tempera and oil paint.

## **Advanced Art**

*Students must have successfully completed and passed “Drawing & Painting” to enroll in this course.*

An interactive course helpful for college bound students. Students will focus on large-scale projects that will help to build up their art portfolios. Students will explore and strengthen their skills in a variety of media from pencil drawings through oil paintings.

## **Senior Art Workshop**

*Students must have successfully completed and passed “Advanced Art” to enroll in this course.*

This course is designed for the college bound or serious art student. This is an intensive art course where students further develop their skills and create artwork more independently. Students should be motivated and will be required to complete work both inside and outside of class.

## **AP Art**

This intensive course provides guidance to the advanced student in the preparation of a portfolio that will fulfill the requirements for the Advanced Placement Studio Art portfolio. The course is for the highly skilled, gifted junior or senior student that comes to this advanced class with an extensive background at the secondary level in the visual arts. The core of this class will be the completion of a series of works based on a student-created theme. Students will need to work outside the classroom as well as in class and beyond scheduled periods. It is strongly suggested also enrolling in an independent study during the off-semester. Students who enroll in AP Studio Art are expected to take the AP Examination in May for college credit at student cost.

*Prerequisites: Students should successfully pass “Advanced Art” in order to be eligible to take the class.*

## **Independent Study**

Students who have particular interests in a specific field of art may enroll in an independent study program in that area with art teacher approval.



# Music Department

## Choral Music

### Mixed Chorus

This group is composed of students from grades 9-12 and is open to anyone desiring to participate in a high school choral ensemble. Membership will enable students to receive a musical experience and develop basic techniques in vocal music.

### Girls' Chorus

This group is composed of students from grade 9-12. Interested students will receive a musical experience by learning and performing choral literature. They work on three and four part arrangements for the female voice.

### A'Cappella Choir

This is the most select group among the choral experience offered at JHS. Membership is based upon acceptance through a successful audition by the conductor. This choir will learn to perform and appreciate varied selections from the finest music literature and will contribute immensely to the musical life of the school, student, and community. Each member will attend a vocal sectional class each week.

### Men of Tomorrow

This group consists of students from Mixed Chorus and A'Cappella, who gather to sing glee club type songs. Membership is open to all interested students who qualify by audition and recommendation of the director. The group meets before school one or two mornings a week, depending on need and programming.

### Madrigal Singers

The Madrigal Singers is a highly select group of approximately 16 students who are able to perform the madrigal songs of the 16<sup>th</sup> century. This group meets after school one to two days per week, depending on need and programming. Membership is by audition and recommendation of the director.

## Instrumental Music

### Symphonic Band

Students will learn to perform and appreciate varied selections from the appropriate literature. The group will contribute to the musical life of the students, school, and community. Each member will receive instruction for a full year course as well as one sectional each week. *Acceptance into the ensemble is based upon successful completion of 8<sup>th</sup> grade band and director recommendation.*

### Concert Band

This is the most select group among the choral experiences offered at JHS. Students will learn to perform and appreciate varied selections from the finest available literature. The group will contribute immensely to the musical life of the students, school, and community. Students receive instruction for a full year course as well as one sectional class each week. *Acceptance into the ensemble is based upon a successful audition for the director.*

***Co-Requisite: Every member of the Concert Band must be a member of the JHS Red Raider Marching Band. For exemptions, see the Head Band Director.***

### Concert Orchestra

Membership in the Concert Orchestra is for all orchestral string players enrolled at Jamestown High School with previous experience from a middle school string program. A full orchestra rehearsal also takes place every Wednesday after school from 3:00 PM until 4:00 PM. Students who play wind instruments may enroll in this full orchestra by registering for Concert Orchestra Section 2 upon recommendation of the band director(s). The group presents concerts and programs throughout the year containing the finest appropriate literature. String players are scheduled into an instrumental sectional class each week. Students are eligible from grades 9-12.

### Jazz Ensemble

The director bases membership on an audition. The group meets once each week after school beginning in September. The group offers an opportunity to students to study and perform jazz and popular music forms of the past and present. Members are mostly upper classmen.

### Marching Band

The JHS “Red Raider” Marching Band is the most public and recognized part of the JHS band program. Membership in the Marching Band is required of all Concert Band students. Symphonic Band students are strongly encouraged to participate in this activity. The Marching Band participates in high school football games, field band competitions, and at other prestigious events by invitation. Practices are held after school hours during the season and for one week in the later part of August.

*Color Guard: Color Guard auditions are held in the spring of each year.*

### Winter Guard

Winter Guard is an activity combining color guard and dance activities. Practices are held after school hours from November until early April.

*Requisite: Marching Band is required of all winter guard members in the highest level guard.*

# *JHS Academy of Business*

The Jamestown High School Academy of Business is a specialized course of study which enables students to pursue academy courses with the same group of students beginning their sophomore year. Students enrolled in the academy are eligible to receive a Regents or an Advanced Regents Diploma with an expanded certificate of Business Studies. Students will achieve universal business skills and knowledge with a focus either on the Financial Industry or the Hospitality & Tourism Industry. Academy members will have a vast array of industry-sponsored activities including field trips, shadow days, classroom speakers, and several other opportunities limited only to academy students. Students interested in the academy need to fill out the Academy of Business application their Freshman year (see your guidance counselor). Space is limited.

<b>Academy of Finance</b>		<b>Academy of Hospitality &amp; Tourism</b>	
<i>Grade Level</i>	<i>Total Credits</i>	<i>Grade Level</i>	<i>Total Credits</i>
<u>9<sup>th</sup> Grade</u> Career Exploration, Recruitment, Application, & Selection	1	<u>9<sup>th</sup> Grade</u> Career Exploration, Recruitment, Application & Selection	1
<u>10<sup>th</sup> Grade</u> Computer Applications *	1	<u>10<sup>th</sup> Grade</u> Computer Applications *	1
<u>11<sup>th</sup> Grade</u> Accounting I *	1	<u>11<sup>th</sup> Grade</u> Hospitality & Tourism *	1
Internship		Internship	
<u>12<sup>th</sup> Grade</u> Personal Finance *	1	<u>12<sup>th</sup> Grade</u> Contemporary Leisure *	1
<u>12<sup>th</sup> Grade</u> Business Communications	1	<u>12<sup>th</sup> Grade</u> Business Communications	1
<u>12<sup>th</sup> Grade</u> Government & Economics	1	<u>12<sup>th</sup> Grade</u> Government & Economics	1

\*Potential college credit available

### Top Reasons to Join:

- ❖ Real World Curriculum
- ❖ Internship Opportunities
  - ❖ Earn College Credit
- ❖ Certificate of Business Studies
- ❖ Excellent Resume Builder
  - ❖ Educational Trips



# Business Department

## Career Exploration

Course emphasis is to provide the student with an opportunity to explore career options and develop an understanding of job expectations in the workplace. A “hands-on” approach utilizing computer programs, the Internet, magazines, and career resources allows the students to develop an awareness of changes taking place in the workplace. A mock interview, a shadow study, and development of a career portfolio are key components of the class. Students will also use word processing software to develop work processing skills. Emphasis is on the application of formatting skills to create letters, reports, and other business and personal documents.

*Recommended Grade Level: 9*

## Business Mathematics

Course content includes the mathematics of business as it applies to the business cycle, banking and finance, office mathematics, and a variety of personal money management applications.

*Recommended Grade: 10-12*

## Accounting I

Students will learn the fundamentals of accounting using a hands-on approach through various projects. Students will be prepared to perform manual as well as computerized applications. This course is recommended for students going on to post-secondary accounting; however, all students are welcome to try this class to explore career options. *Students who meet program eligibility requirements students may receive college credit at JCC (BUS 1410) and JBC (ACC 101).*

*Recommended Grade: 10-12*

## Accounting II

Students will perform advanced computerized accounting (no computerized experience necessary). Automated Accounting II is designed as an extension of Accounting I, additional topics involving more complex bookkeeping-accounting applications significantly extend the basic accounting concepts and skills. Upon completion, a student could apply for an entry-level position in bookkeeping.

*Recommended Grade: 11, 12*

*Prerequisite: Accounting I*

## Personal Finance

Course offers in-depth financial information. Topics include but are not limited to careers, banking services, amortization schedules, loan applications, and all types of insurance policies. Students will also work on the stock market, investment opportunities, budgeting, personal and business, federal and state taxes and payroll. Students will learn money management for all stages of their lives. *(Class may not be available every year. See course selection sheet for availability.)*

*Recommended Grade: 11-12*

## **Computer Applications I**

Students are introduced to a Windows environment through the use of the Microsoft Office suite. Students will work in a guided, self-placed setting and develop problem-solving skills to complete beyond Word into Excel, PowerPoint, and Access. Computer Applications is a great class for those students going to college or into the world of work. It teaches them how to use the Microsoft Office software through Practical and real-world exercise/documents.

*Evaluation: Local Exam*

*Prerequisite: Limited to students in grades 10-12*

*Eligible students may receive four college credits through Jamestown Community College for CSC 1560-Microcomputer Applications I.*

## **Introduction to Web Site Design**

The goal of this course is to provide students with the basic skills necessary to use the Internet and the World Wide Web as research and promotional tools. The web browser, search engines, bookmarks, and email are some of the topics that will be covered. Students will create useful and appealing web pages and web sites using basic HTML and JavaScript.

*Recommended Grade: 11-12*

## **Introduction to Hotel/Restaurant and Recreation/Tourism**

This course will introduce the students to the history, function, and structure of the travel, hotel, restaurant, and recreation industries. The course describes the development of water, land, and air transportation and looks at the history of the accommodations industry. Students will be introduced to the structure of various industry components and current issues and opportunities will be analyzed. The course will also look at the psychology of travel and tourism as it identifies travel motivators and barriers. We will examine both the positive and negative impacts the tourism activity has had on both the economic and social well being of the host and guest.

*Recommended Grade: 11-12*

*Eligible juniors and seniors may receive 3 college credit hours upon successful completion of this course with a minimum C average.*

## **Contemporary Leisure and Recreation**

This is a course in our Hospitality and Tourism curriculum. The course provides a diversified, contemporary picture of the role of leisure in American culture. Students will be introduced to leisure as an individual, personal experience, seen from a psychological and philosophical vantage point; a social system using sociological methods of analysis; an operational function of providing recreational facilities and programs. Topics will include the theoretical background of recreation behavior, the determinants of recreation behavior, an overview of recreation pursuits and settings, and a survey of the occupational opportunities in the field.

*Recommended Grade: 11-12*

*Eligible juniors and seniors may receive 3 college credit hours upon successful completion of this course with a minimum C average.*

## **Business of Music**

Love music? Then have we got a class for all you music enthusiasts! This new class combines your love of music with the business side. Learn about (just to name a few):

Careers in the Music Industry  
Past and Present Trends  
Legal Aspects, Economics, and Marketing of the Music Industry  
Entrepreneurship in the Music Industry  
Event Production

Enjoy learning about the business side of music while working on hands-on projects. This will not be your typical class; come see what all the excitement is about and don't forget to bring your own enthusiasm!

*Recommended Grade: 10-12*

## **Principles of Business and Marketing**

This course is designed to introduce the students to entrepreneurship/free enterprise, marketing strategies, human resource foundations, communications, interpersonal relations, career and product planning. In addition, students will be introduced to the exciting world of sports and entertainment marketing. Students will learn how sports and entertainment has become an important part of our modern economy.

*Recommended Grade: 10-12*

## **Business Development/Desktop Publishing & Media**

The Business Development course is a program designed to connect students with small businesses from the community. They will have an opportunity to utilize the different skills they have developed from classes such as Marketing, Web Design, Desktop Publishing, Computer Applications, Computer Graphics, and more. The students will create real-life applications for businesses to be used in their everyday operations. This is an excellent opportunity for students to gain insight into the needs of today's businesses.

Desktop Publishing & Media Presentation is a hands-on course that involves using different avenues of technology and software to present information. Students will actively engage in the design and creation of real-life presentations utilizing different media components. Students will work on projects individually and as part of a group. Computer technology and desktop publishing basics will be offered.

*Recommended Grade: 10-12*

*Prerequisite: Must have completed Computer Applications or have permission from instructor.*

## **Business & Personal Law**

Course emphasis is on the individual as they encounter the law in their personal life, family life, and occupational life. Students should gain a genuine respect and intelligent application for a segment of the law that affects them both at home and at work. Numerous speakers from the legal field and a mock trial enhance the curriculum.

*Recommended Grade: 10-12*

## Youth Apprenticeship Program

YAP is a program which pairs a student with a local business or industry giving the student on-the-job experience along with coordinated school coursework. This provides practical application of skills learned in the classroom with skills on the job. Students see the benefits of academic learning as they work beside highly skilled employees. Students are provided with coaches and mentors who guide their learning while linking it to information they learn at school.

**Previous Employers** (changes yearly):

- Cummins Engine
- MRC Bearings
- Blackstone Business Enterprises
- Ed Shults Auto Group
- Artone Mfg.
- Jamestown Container Co.
- Jamestown Precision Tooling
- Jamestown Public Schools

*Program open to 11<sup>th</sup> and 12<sup>th</sup> grade students who have successfully completed Integrated Algebra and Geometry or Applied Geometry. Must apply and be accepted into the program.*

### Apprenticeship/Workforce Prep

Y.A.P. is a unique class that meets during a skinny all year long. The curriculum for this course is based around the SCANS skills, skills necessary for employability. Students use this class to analyze skills used in the workplace. In addition, students will plan, implement, and participate in fundraising activities and be responsible for performing community service, as well as managing and operating the school store. This course helps students to develop and master employability skills to be more marketable to the workforce, become part of a team, and achieve future goals. This course is taught in context with other Y.A. P. classes.

*Recommended Grade: 11-12*

*Evaluation: Portfolio Presentation*

### Apprenticeship/Job Site

To be taken in conjunction with the Apprenticeship/Workforce Prep Class. Students work with local businesses 6-8 hours per week on Tuesdays and Thursdays under the guidance of a worksite coach or mentor.

### Computer Applications

The Y.A.P. Computer Applications course will expose the students to computer-based applications used in business/office and personal finance. Students will acquaint themselves with the ethical use of information technology. They will also understand how information technology is used to retrieve data and how info systems can impact and limit communication.



# Technology Department

*MST:* Courses with this annotation may be applied as credit in math, science, or technology toward diploma requirements.  
*Art:* Courses with this annotation may be used as credit in art toward diploma requirements.

## **Technical Drafting (Art)**

A study of the procedures, process, techniques, and equipment used to create mechanical drawings of a variety of objects. The course examines single view, multi-view, pictorial drawings, auxiliary views, sectional views, and developments. This course is recommended for those intending to enter engineering, architectural, design and technical fields.

## **CAD (Computer Aided Drafting)**

*Prerequisite: DDP or Technical Drafting (Waived for a junior or senior who has passed the Regents exam in Integrated Algebra.)*

Computer Aided Drafting is a study of the use of computers to produce technical drawings. This course is recommended for those entering the engineering, architectural and technical field.

## **Advanced CAD**

*(Previously Combined with Blueprint Reading and Small Home Design)*

*Prerequisite: CAD*

This course is designed for learning advanced technical drawing methods, small home design and blueprint reading. The drawings will focus on architectural drawing relating to small home design. Students will be introduced to concepts for creating and reading blueprints. Students interested in entering college in the field of Engineering or Architecture will benefit greatly from this course.

## **DDP (Drawing and Design for Production) (Art)**

*(Replaces Manufacturing/Production)*

This course intends to provide opportunities in the areas of design and drawing through creative thinking, decision-making and problem-solving experiences. Strategies of design and drawing appropriate now and in the future are emphasized. Students will examine the design and production process through a series of hands-on, design briefs to solve proposed problems based on the engineering process. Students will be introduced to fundamentals of technical drafting, CAD, & basic woodworking.

## **Principles of Engineering**

*Prerequisites: Limited to juniors or seniors who have successfully completed DDP & CAD or who obtain teacher permission. Must also have passed or be concurrently enrolled in Algebra II/Trig (or higher) and Chemistry (or higher).*

This is a hands-on, laboratory-based course which introduces students to concepts of engineering. Bio-technical, chemical, civil, electrical, and mechanical engineering are studied. Hands-on, problem-solving activities will include all aspects of engineering process; design, prototype creation, testing, modification, and marketing. This course provides “real-life” applications of math and science concepts. This will be helpful for any student planning to enter college to study engineering.

## **Energy/Power/Transportation**

This course studies the basics of energy forms, energy conversion, simple machines, energy conservation through a series of projects. Students will also examine the fundamentals of the land, air, and marine transportation systems including structure & organization of the systems as well as forms of transportation devices pertaining to the various modes of transportation.

## **Electricity/Electronics (MST)**

This class focuses on the practical application of electrical wiring skills. The student will study electronics, residential, commercial and industrial wiring methods. The construction of electronics circuits, reading wiring diagrams and the building of various electrical systems in the shop provide an excellent learning opportunity. The student will study basic electronics, AC & DC circuits, digital and analogue electronics, motor and motor control systems. Students will learn about career opportunities in the electrical/ electronics industry.

## **Digital Electronics (MST)**

*Prerequisite: Electricity/Electronics or passing grade on the Integrated Algebra Regents exam.*

This course introduces students to applied digital logic through the study of digital circuits and systems found in the home and commercial electronic equipment. Students will design circuits to solve problems and use appropriate components to build their designs. Students use math and science in solving real-world problems.

This course covers several topics including:

- Analog and digital fundamentals
- Number systems and binary addition
- Logic gates and functions
- Boolean algebra and circuit design
- Decoders, multiplexers and de-multiplexers

## **Information Technology I (MST)**

This first year course covers basic skills in computer operation and repair, web development, networking, computer architecture and business skills. Learning will focus on understanding hardware and software systems and peripherals that are a part of every PC. Students will learn troubleshooting techniques to identify and resolve a variety of common PC problems. Students will also learn the fundamentals of HTML programming to create their own web page. This course prepares students for A+ certification.

## **Information Technology II (MST)**

*Prerequisite: Information Technology I*

This second year course covers communications, software development and applications. Students spend some time working on individual areas of interest. Students inclined to pursue the business aspect of Information Technology will continue working on web development, networking and E Business Skills. E Business Skills covers the aspects of starting your own business. Students will also gain experience in graphic design utilizing Adobe Illustrator and Photoshop.

## **Computer Graphics/Media Communications (Art)**

This course will introduce students to vector and raster based graphics design through the use of computer graphics programs such as Adobe “Illustrator” and “Photoshop” and other applications. There will be an integration of computer graphic imagery for print and web use. Projects will be conducted as client driven examples and will include the design of the following: logo, business and greeting cards, poster, tee shirt, 3-D packaging, CD cover, scanning, using a digital camera, burning optical media, file transferring and formatting. General computer and peripheral operating skills will be learned in addition to design projects.

## **Principles of Metal and Welding**

*Prerequisite: Students must have passed at least Integrated Algebra and the required Regents exam. Must be a junior or a senior.*

This course is a study of materials, processes and techniques, and fasteners used in the metal industry. Blueprint reading will be covered along with different means of cutting metal. Emphasis will be placed upon the various forms of welding with practical hands-on experience.

*Students who meet eligibility requirements may receive 3 college credits for JCC WLD 1200.*

## **Small Engine Maintenance & Repair**

*Prerequisite: Interest in small engine maintenance and repair. Preference given to seniors and juniors.*

Course content will include engine construction and principles. Two cycle and 4 cycle engines, carburetion, fuel, ignition, lubrication, engine cooling systems, trouble-shooting, test measurements, and repair.

## **Motorcycle Maintenance & Repair**

*Prerequisite: Successful completion of Small Engine Maintenance & Repair.*

Well-equipped stations are provided for students to work on and repair motorcycle engines. Students will be required to trouble-shoot, order parts, and repair different motorcycles. Airlift tables provide easy maneuvering of bikes.

## **Manufacturing Technology I & II (MST)**

*Prerequisite: Limited to students enrolled in grades 10-12.*

This is a computerized laboratory-based course, which introduces students to real world applications using math and science. Students will complete hands-on activities using computer Aided Design (CAD), Computer Numerical Control (CNC), Lathes and Mills, Quality Control, Electronics, Electricity, Pneumatics, Hydraulics, and Robotics. The student will program machines to perform various tasks. These tasks will lead to the manufacturing of a specific product. This course is recommended for students planning to enter an engineering program and/or a trade school. (11th or 12th grade)

## **Robotics Engineering I**

*Prerequisite: Manufacturing Technology I or a strong math/science/computer background with teacher approval.*

The focus of this course is on the design, construction and programming of robots. This includes, but is not limited to robots that walk, grasp, play music, sense of direction and have an “intelligence” about them. Strong math and science skills are required for this course along with an aptitude for design and function. This course teaches real-world robotic technology using the LEGO Company for the structural components.

## **Robotic Engineering II**

*Prerequisite: Robotics I*

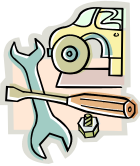
This is the sequential component of Robotic Engineering I. The focus of this course is on structural engineering, physics, power and adaptation of a product for multiple applications. The mastery of math and science concepts is essential for this course. Speed, thrust, force, scale, power, energy, acceleration, inertial and Empirical Law are a few of the components for which the design and application of projects will be based on. The programming software is “Labview”, which is the same software used by NASA. The LEGO Company components are what will be used for the structural members of the projects.

## **Videography Program**

The Videography program offers a multidisciplinary, student-centered approach to instruction, enabling students to study English Language Arts through exploration and development of technical video production. Program instructors include members of the English and Technology departments who collaborate to align the curriculum in ELA with technology and media through project-based learning.

Students may enroll in the Videography program beginning in grade 9 and continuing through grade 11. Students in the Videography program may earn up to three credits in English Language Arts, leading to the ELA Regents examination in Grade 11. Students in grades 9 and 10 also receive a technology credit for additional course work devoted to the completion of projects in video production.

Group projects, as well as independent work are integral parts of this non-traditional atmosphere for the motivated and creative student. Critical thinking, reasoning, and analysis of themes, issues and current events are explored and applied through the video production process and literature. Students focus on various skills, which are strengthened in the two-year looping of the program, such as media literacy, video/audio editing, technical reading, research, independent and group presentations and extensive reading and language art skills. The goal of the course is to prepare the student for the real world of work as well as the State English Language Arts exam and other practical post high school education. Students produce various video projects like documentaries, Public Service Announcements, Poetry videos, Talk Shows, Investigative Reports, Novel-based News Reports and Novel-based scene portrayed in a video production.



# BOCES Program

## **Auto Body Repair**

This two-year program offers instruction in repairing, refinishing, and painting damaged vehicles. Students work with specialized tools and equipment and acquire job related techniques.

## **Auto Technology**

Auto Technology is a two-year program that teaches students to maintain and repair vehicles. Students learn the basic fundamentals of the trade and how to use specialized equipment. Advanced students may be able to qualify as the Official New York State Automobile Inspectors by taking this exam.

## **Conservation**

This program equips students with employable skills in the areas of natural resources, conservation and site construction. General environmental issues, ecology, horticulture, hydrology, equipment operation and maintenance, and wildlife and land management are studied. Students are provided with a variety of practical hands-on field experiences at the 150-acre Hewes Center campus in addition to a number of off-site locations within Chautauqua County.

## **Construction Technology**

Students will acquire skills for entry-level work or post-secondary education including rough and finished carpentry, masonry, plumbing, heating and electrical. Students also receive instruction in construction procedures such as the use of power and specialized tools and equipment, footings and foundations, framing, roofing, siding, stair construction, interior and exterior finishing, blueprint reading and estimating.

## **Cosmetology**

This two-year program instructs in the skills and theory needed for the care of hair, nails, and skin. Students learn the management techniques needed to operate a beauty salon and gain hands-on experience in the cosmetology clinic, which is open to the public. This program gives students the one thousand hours required for the New York State Licensing exam.

## **Criminal Justice**

This is a one-year program that provides students with career opportunities in the continually expanding field of law enforcement and criminal justice while learning about our legal system. This course furnishes the students experience with criminal investigation, public and private security, use of the computer in law enforcement, fingerprinting and public relations.

## **Culinary Arts**

This is a one or two-year program designed to provide students with skills in short order, specialty and quantity preparation and service of food. Students proceed at their own pace, acquiring skills through practical experience in several areas.

## **Diesel Mechanics**

Diesel Mechanics is a two-year program that emphasizes the study of gas/diesel engines and the maintenance/repair of small engines. Students receive instruction in entry-level skills for diesel/fuel systems, fundamentals of hydraulics, brake systems and general equipment operation. This course includes hands-on experience in preventative maintenance, reconditioning and troubleshooting agricultural equipment and truck vehicles.

## **Health Careers**

This modular program provides instruction in four basic areas: childcare, certified nurse aid, hospital aid and habilitation aid. Students apply what they've learned through clinical experiences at childcare centers, hospital, nursing homes and various health care facilities throughout the community. Upon completion of the nurse aid module, students are qualified to take the exam for certified nurse aide and personal care/ homemaker home health aid. Students may also receive credit for health from their home schools.

## **Motor Sport Fabrication/Precision Machining**

Students completing this course will be able to safely set up and operate lathes, mills, grinders, drill presses, band saws, MIG welders, ARC welders, tubing bender, oxy-fuel torches, plasma cutters, CNC mills and lathes, and engine boring machines. Instruction will include use of measuring tools, CAD-CAM, blueprint reading and shop math. This course is recommended for students interested in pursuing a career in industrial or mechanical engineering, welding or machining. Although there are no prerequisites for this class, a background in math is helpful. Students passing this course may be eligible to receive 13 ECC college credits.

## **Public & Private Security**

The purpose of this one-year Public and Private Security Course is to focus on an increasing demand to provide skilled personnel in the field of Public and private Security. This course will include familiarization with the career opportunities and certification requirements in the public and private security business. The students in this course will receive instruction in basic computer skills and communication and technological skills relating to the Public and Private Security Field. Juniors are preferred, but seniors are accepted on a space available basis. This course can be taken as a single, four-credit course or it can be taken with the Criminal Justice Program as an eight unit sequence. This course is designed to complement all existing articulation agreements with local colleges and has the potential for students to receive six college credits if established standards are achieved.

## **Small Animal Science**

This technical course teaches specialized and advanced skills in areas such as: dog grooming, kennel management, dog training, veterinary science and the care and handling of animals in a mock laboratory setting. Students interested in furthering their education in the veterinary science technology field should consider this program.

Development of professional behavior and attitude is stressed. Students in the program work directly with the public. A dog grooming clinic is open to the public in which the students groom their cats and dogs. Appropriate skills, attitude and behavior are needed when dealing with the public in the successful operation of the dog-grooming clinic. Students work with a wide variety of animals in the small animal science program. They must have complete knowledge of the care and handling of these animals. The animals that students work with are cats, dogs, rabbits, chinchillas, rats, mice, hamsters, gerbils, guinea pigs, birds and ferrets.

# Student Services

## Special Education Department

All disabilities are serviced at Jamestown High School. Students are serviced in the least restrictive environment based on the Individual Education Program created at the student's CSE meeting. Occupational, physical, and speech therapy are also provided by licensed therapists assigned to Jamestown High School. A school psychologist also provides psychological services to students. Transition planning for post-high school training, employment, and adult services is provided.

Students working toward a Regents diploma receive instruction in a general education class and receive specialized instruction to address their disability from a special education teacher.

Students working toward an IEP Certificate receive most of their instruction in a special education class. Basic levels of reading, math, writing, health, and other life skill areas are stressed. Career awareness through a specially designed Industrial Arts and Homemaking Curriculum are an important aspect of the senior high program. Work study is provided for 11<sup>th</sup> and 12<sup>th</sup> year students as well as vocational-technical program at BOCES. Independent adult functioning is the ultimate goal of this comprehensive special education program.

## Guidance Department

Guidance Counselors provide counseling, consultation, and coordination services to students, teachers, parents, and administrators. Counselors help students as they seek to identify and achieve personal goals and assume responsibilities in various life roles at each developmental stage. Counselors function as members of a Student Assistance Committee to intervene in a developmental way to foster the educational, personal, and social growth of students. Counselor functions include academic planning and advisement, personal/social growth, crisis intervention services, transitional services, parent support, career and college planning. Students and parents are invited to explore the reference and video materials on vocational training, colleges, financial aid and scholarships located in the College and Career Center at the JHS Media Center.

## Library

Jamestown High School Media Center offers a number of services to members of the High School family, as well as the local community. Patrons may choose from over 15,000 volumes of printed resources, including books and other reference materials. A large collection of past issues of magazines and newspapers also are included. Along with the printed materials, patrons have access to a number of electronic resources, including the vast array of information available through the Internet. The library's card catalog also is on-line, allowing users more flexibility when conducting a search of the library's holdings. Faculty members can access the center's video collection for use in the classroom.