

# COURSE CATALOG 2010-2011



## **SPORT AND MEDICAL SCIENCES ACADEMY**

**A College Preparatory 6-12 Magnet School**

**280 Huyshope Street**

**Hartford, CT 06106**

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

***Preparing Tomorrows Professionals Today!***

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# Sport and Medical Sciences Academy

## Course of Study

Courses	Cr
<b>English (4 Credits)</b>	
English 1	1
Freshman Composition	1
English 2	1
Humanities	1
American Literature	1
British Literature	1
AP Lit and Comp	2
Sport Journalism	1
<b>Mathematics (3 Credits)</b>	
Algebra 1 (A)	1
Algebra 1 ( B)	1
Geometry	1
CAPT Geometry	.5
SAT Algebra 2	.5
Algebra 2	1
Pre-Calculus (A)	1
Pre-Calculus (B)	1
AP Calculus	2
<b>Social Studies/History (3 Credits)</b>	
Global Studies	1
Civics	1
US History	1
Psychology	1
<b>Science (3 Credits)</b>	
Physical Science	1
Biology	1
Chemistry	1
Principles of Biomedical Sciences	1
Physics	1
Human body Systems	1
Bio Technology	1
Uconn (107)	1
Uconn (108)	1
<b>World Languages (2 Credits)</b>	

Courses	Cr
<b>Visual &amp; Performing Arts (2 Credits)</b>	
Graphic Design	1
Media Marketing	1
<b>Business ( 2 Credits)</b>	
Marketing 1	1
Medical Finance	1
<b>Health/PE (2 Credits)</b>	
Sport Studies 1	1
Sport Studies 2	.5
Health	.5
Strength and Conditioning	1
Introduction to Athletic Training	1
Exercise Physiology	1
<b>Theme Courses (4 Credits)</b>	
Introduction to Athletic Training	1
Exercise Physiology	1
Bio Technology	1
Human Body System	1
Strength and Conditioning	1
Principles of Biomedical Sciences	1
Sport Journalism	1
Medical Finance	1
Media Marketing	1
Physics	1
Medical Intervention	1

Spanish 1	1
Spanish 2	1
Spanish 3	1
Spanish 4	1
<b>Capstone (1 Credit)*</b>	
Learning Service	
6,7 & 8	45hrs
9 & 10	60hrs
Job Shadow	
11th	3
Internship	
12 <sup>th</sup>	1

<b>Electives (# Credits)</b>	

**Graduation Requirements**

**(Hartford BOE)**

**SMSA**

English 4 Credits  
 Math 3 Credits  
 Science 3 Credits  
 History 3 Credits  
 Visual & Performing Arts. 2 Credits  
 World Language 2 Credits  
 Physical Education 1.5 Credits  
 Health, Nutrition, Wellness .5 Credits  
 School Thematic Courses 4 Credits  
 Capstone Experience 1 Credit

(English 1 & 2; American Literature)  
 (Algebra 1, Geometry, Algebra 2)  
 (Biology and Chemistry Lab Courses)  
 (U.S. History, Global Studies, Civics,)

**Total 24 Credits**

**25 Credits**

**Additional (Sport and Medical Sciences Academy) Requirements:**

Business 2 Credit  
 Learning Service  
     6, 7 & 8 – 45 hours  
     9 & 10 – 60 hours  
     11<sup>th</sup> – 3 job shadow  
     12<sup>th</sup> – Internship (capstone) 1 Credit

# **Sport and Medical Sciences Academy**

**Grades 6-12**

## **Overview**

The Sport and Medical Sciences Academy is a college preparatory middle and high school with a focus on medical and sport sciences. Students receive a rigorous language arts, mathematics and science foundation that is applied to a core curriculum and various elective courses pertaining to our themes. We offer several college credit programs through the University of Connecticut – Early College Experience Model and Capital Community College. SMSA high school students have the opportunity to earn up to 30 free college credits. In addition to a strong academic program, students experience a student/staff mentoring program (10:1), middle and high school athletics (CIAC), clubs, SAT Preparatory Academy, etc. SMSA believes in a strong character approach to learning by instilling the Four Core Beliefs (Discipline, Respect, Dedication, Responsibility) into each student’s educational experience.

## **Special Features**

1. Mentoring- 10/1 student / teacher ratio
2. CMT,CAPT and SAT Saturday’s ( CMT &CAPT – 8 consecutive) ( SAT – 4 consecutive)
3. Name one of America’s best high school by US News and World Reports three consecutive years - 2007, 2008, 2009
4. Strong College Center that works collaboratively with the School Counselors to have all students to graduate and apply and get into 2 and 4 year universities and colleges.
5. State of the art \$71million school building that was built to enhance our two themes.

## **Hours**

Our school day is from 7:45 AM to 2:09 PM. We offer after school tutoring with certified staff as well as homework centers. The building is open Saturday for students who need further assistance. We offer summer school for those students in need of credit recovery. Additionally, we run a Summer Bridge Program to assess the learning needs of incoming students to SMSA.

## **Dress Code**

### **GRADES 6 THRU 11**

1. White Oxford Business Shirt – Short or Long Sleeves – Shirts must be tucked in – NO COLORED SHIRTS UNDER THE OXFORDS – ONLY WHITE, NO HOODS
2. Khaki pants (no cargo pants) – BELTED AT WAIST – SIZE APPROPRIATE
3. Official SMSA Skirt (optional for girls)
4. Official SMSA Tie (required for boys)
  - a. Black – 7<sup>th</sup> and 8<sup>th</sup> Grades
  - b. Silver – 9<sup>th</sup> and 10<sup>th</sup> Grades
5. Official SMSA Black Vest with Logo

6. Black dress shoes or sneakers (must be all black including soles – zero colors)
7. Black or Brown Belt (required for boys, optional for girls) – pants must be belted at the waist
8. Official SMSA lanyard and ID (issued by the school during the first week – if lost or misplaced throughout the school year - \$2.00 for a lanyard and \$5.00 for ID)- students must carry the ID at all times.

## **GRADES 12**

1. Official SMSA Logo Polo Shirt (Columbia Blue, Grey, Black or White)
2. Khaki or Black Pants (no cargo pants) – BELTED AT WAIST – SIZE APPROPRIATE
3. Black or Brown Belt (required for boys, optional for girls) – pants must be belted at the waist
4. Official SMSA lanyard and ID (issued by the school during the first week – if lost or misplaced throughout the school year - \$2.00 for a lanyard and \$5.00 for ID)

### **Schedule**

## **GRADES 6 -8**

**Type of Schedule:** Block/Full Year

**Core Classes:** run on a year long basis (math, science and English)

**Class Length:** 67 minutes for entire year

**Specials Classes:** run on a semester basis (PE/Health, music, art, social studies, etc.)

**Class Length:** 67 minutes for half a year (one semester)

**Number of Classes:** 5 per day

## **GRADES 9 – 12**

**Type of Schedule:** Block/Semester

**Number of Classes:** 4 per semester, total of 8 classes per year

**Class Length:** 84 minutes

**Semester Timeframe:** August thru Mid-January – Semester One  
Mid-January thru June – Semester Two

### **Contact**

Mr. John P. Lavery, Principal  
Mr. Joseph F. Kopf, Assistant Principal  
Mr. Jose A. Colon, Dean of Students  
Mrs. Irasema Rivera-Medina, Guidance Counselor  
Mrs. Christine Dionne, Guidance Counselor  
Richard Serrano, College Specialist

280 Huyshope Avenue Hartford, CT 06106  
Phone 860-695-6900

## MATHEMATICS

**Course Name: 6<sup>th</sup> Grade Math**

Grade: 6th

Credit: None

Duration: One year

Prerequisite: None

Description: Students in this math course will study the following topics:

- Data and Statistics
- Relationship among Fractions, Decimals and Percents
- Ratios, Proportions, and Percents
- Algebraic Concepts
- Geometry and Measurement
- Probability
- Problem Solving Strategies
- Estimation Strategies

In addition to the units of study listed above, classroom instruction will focus on CMT preparation.

**Course Name: 7<sup>th</sup> Grade Math**

Grade: 7th

Credit: None

Duration: One year

Prerequisite: None

Description: Students in this math course will study the following topics:

- Data and Statistics
- Relationship among Fractions, Decimals and Percents
- Ratios, Proportions, and Percents
- Algebraic Concepts
- Geometry and Measurement
- Probability
- Problem Solving Strategies
- Estimation Strategies

In addition to the units of study listed above, classroom instruction will focus on CMT preparation.

**Course Name: 8<sup>th</sup> Grade Pre-Algebra**

Grade: 8th

Credit: None

Duration: One year

Prerequisite: None

Description: Students in this math course will study the following topics:

- Data and Statistics
- Relationship among Fractions, Decimals and Percents
- Ratios, Proportions, and Percents
- Algebraic Concepts
- Geometry and Measurement
- Probability
- Problem Solving Strategies
- Estimation Strategies

In addition to the units of study listed above, classroom instruction will focus on CMT preparation.

**Course Name: Algebra 1**

Grade: 8<sup>th</sup> – College Prep and Honors

Credit: None

Duration: One year

Prerequisite: This course is offered to select honors students in grades 7 and 8.

Description: Students in this math course will study the following topics:

- Operations and Variables
- Solving Linear Equations
- Linear Functions and Scatter Plots
- Systems of Linear Equations
- Proportions, Percent, and Probability
- Exponential Functions
- Solving Linear Inequalities

In addition to the units of study listed above, classroom instruction will focus on CMT preparation.

**Course Name: Algebra 1 A**

Grade: 9<sup>th</sup>

Credit: 1

Duration: Fall semesters

Prerequisite: N/A

Description: This course is the foundational math course for all incoming freshmen. The skills in the course are aligned with the CT state standards with an emphasis on the CAPT. Topics include operations and variables, solving linear equations, working with

linear functions, their graphs, and scatter plots as well as solving linear systems. Students also receive preparation on how to solve grid-in and open-ended CAPT problems with a special focus on problem solving skills enabling students to apply mathematical skills and make meaningful connections to life's experiences.

**Course Name: Algebra 1 B**

Grade: 9<sup>th</sup>

Credit: 1

Duration: Spring Semester

Prerequisite: N/A

Description: This course is an extension of Algebra 1 A. The skills in the course are aligned with the CT state standards with emphasis on the CAPT. Topics include proportions, percents, and probability, exponential functions, solving linear inequalities, polynomials and factoring as well as radicals, quadratic equations and functions. Students will continue to be prepped on how to solve grid-in and open-ended CAPT problems with a special focus on problem solving skills enabling students to apply mathematical skills and make meaningful connections to life's experiences.

**Course Name: Honors Algebra 1**

Grade: 9<sup>th</sup>

Credit: 1

Duration: Fall Semester

Prerequisite: N/A

Description: This course is the first math course and foundation math course for all honors incoming freshmen. The skills in the course are aligned with the CT state standards with emphasis on the CAPT. Topics include operations and variables, solving linear equations, working with linear functions, their graphs, and scatter plots, solving linear systems, proportions, percents, probability, exponential functions, solving linear inequalities, polynomials and factoring as well as radicals, quadratic equations and functions. Students will also receive preparation on how to solve grid-in and open-ended CAPT problems with a special focus on problem solving skills enabling students to apply mathematical skills and make meaningful connections to life's experiences. This course is fast-paced, intense, and includes a more in-depth understanding of the concepts.

**Course Name: Geometry**

Grade: 9<sup>th</sup> Honors and 10<sup>th</sup> College Prep

Credit: 1

Duration: Fall/Spring semesters

Prerequisite: Algebra I B

Description: This course includes an in-depth analysis of plane, solid, and coordinate geometry as they relate to both abstract mathematical concepts as well as real-world problem solving. Students will develop critical thinking skills by using inductive reasoning to make conjectures about real world situations and use deductive reasoning to confirm their conjectures. Students will study basic concepts, geometric relationships and

properties of geometric figures, including formulas. Students will study points, lines, and angles in a plane, parallel lines and transversals. A major emphasis of this course is to allow students to investigate geometric situations. Properties of triangles, quadrilaterals, polygons, and circles should receive particular attention. Congruence and similarity of triangles will be established using appropriate theorems. Students will determine characteristics of right triangles and apply the Pythagorean Theorem to solve problems. Transformations including rotations, reflections, translations, and glide reflections and coordinate geometry will be used to establish and verify geometric relationships. Students will learn how to derive formulas and solve problems involving the perimeter, circumference, areas, volume and surface area of two and three dimensional figures. Students will use the traditional tools of compass and straightedge as well as dynamic geometry software that models these tools more efficiently and accurately, to assist in these investigations.

**Course Name: CAPT Geometry**

Grade: 10<sup>th</sup>

Credit: .5

Duration: 1 Quarter

Prerequisite: Algebra I B

Description: This course is an extension of Geometry infusing CAPT style examples of real life situations. The skills in this course meet CAPT and NCTM standards. This course is designed to meet the needs of sophomores to pass the CAPT. Students will practice their problem solving skills with various problems from the four strands (Geometry and Measurement; Working with Data; Number and Proportional Reasoning; Algebraic Reasoning). Students will be familiarized with CAPT style questions such as the open ended and grid in questions. Students will be familiarized with CAPT scoring and the CAPT rubric. Students will recognize the points required to be at the proficient, goal and advanced levels of mastery. Students will use inductive and deductive reasoning to confirm their conjectures through proof. Algebraic and geometric models are used and connected to topics in discrete mathematics.

**Course Name: SAT Algebra II**

Grade: 10<sup>th</sup>

Credit: .5

Duration: 1 Quarter

Prerequisite: Algebra I B

Description: In this course students pursue the study of more advanced algebra. The topics include properties of real number, algebraic expressions, solving equations, absolute value equations and inequalities, probability, relations and functions, linear equations, linear models, family of functions, two variable inequalities, solving systems of equations, and matrices. The use of a graphing calculator continues to be an integral part of the course along with technology.

**Course Name: Algebra II-Honors**

Grade: 10<sup>th</sup>

Credit: 2

Duration: Fall and Spring Semesters

Prerequisite: Honors Algebra I

Description: This course will focus on the advanced algebraic number systems to a complex field, elementary functions using multiple representations (graphical, numerical, algebraic and verbal) including linear, quadratic, polynomial, rational, exponential, and logarithmic functions, linear systems and matrices, periodic functions, and the study of probability, sequences and series, and trigonometric identities. Honors classes will have an introduction to statistics. Problem solving will be emphasized throughout the course. Emphasis will be placed on practical applications and modeling. Appropriate technology, from manipulative to calculators will be used regularly for instruction and assessment.

**Course Name: Algebra II**

Grade: 11<sup>th</sup> and 12<sup>th</sup> graders

Credit: 1

Duration: Fall/Spring Semester

Prerequisite: Algebra I

Description: Algebra II CP is a semester course and a graduation requirement. The following topics will be covered during this course: Linear Functions and Systems of Equations, Graphing Quadratic Functions, Solving Quadratic Equations, Polynomial Functions, Radical Equations and Functions, Exponential and Logarithmic Functions, Linear Inequalities and Linear Programming.

**Course Name: Algebra III**

Grade: 11<sup>th</sup> and 12<sup>th</sup> graders

Credit: 1

Duration: Fall/Spring Semester

Prerequisite: Algebra II

Description: Algebra III is a semester course. The following topics will be covered during this course: Rational Functions, Periodic functions, Trigonometry, Quadratic Relations, Probability and Statistics, and Sequence and Series. Great emphasis will be placed on preparing students for the SAT's and the placement exam for college entrance.

**Course Name: Pre-Calculus A**

Grade: 11/12 Honors / College Prep

Credit: 1

Duration: Fall/Spring Semester

Prerequisite: Algebra 2

Description: Pre-Calculus A is a semester course that will cover the following topics: Review of Algebraic Expressions, Polynomials, Exponents, Rational Expressions,

Equations, Inequalities, Functions (graphs, transformations, combinations, inverses, composite and applications), Complex Numbers, Polynomial Functions, Rational Functions, Variation, and Exponential and Logarithmic Functions.

**Course Name: Trigonometry**

Grade: 11/12 Honors / College Prep

Credit: 1

Duration: Fall/Spring Semester

Prerequisite: Pre-Calculus A

Description: Pre-Calculus B is a semester course that will cover the following topics: Right Triangle Trigonometry, Trigonometric Functions, Graphs of Trigonometric Functions, Applications of Trigonometric Functions, Solving Trigonometric Equations, Verifying Trigonometric Identities, Law of Sines and Cosines, Systems of Equations and Inequalities, Conic Sections, and Matrices and Determinants.

**Course Name: AP Calculus AB**

Grade: 11<sup>th</sup> or 12<sup>th</sup>

Credit: 2 credits

Duration: Fall and Spring Semesters

Prerequisite: Pre-Calculus with Trigonometry

Description: AP Calculus AB is a year long course that will cover the following topics: Limits and Continuity, Rates of Change and Tangent lines, Derivatives of Functions (including logarithmic, exponential, and trigonometric), Rules for Differentiation, Implicit Differentiation, Chain Rule, Extreme Values, Mean Value Theorem, Particle in Motion Problems, Optimization, Related Rates, Linearization, L'Hopital's Rule, Estimating with Finite Sums, Trapezoidal Rule, Definite Integrals and Antiderivatives, Slope Fields, Fundamental Theorem of Calculus, Integration by Substitution, Exponential Growth and Decay, Population Growth, Integral as Net Change, Areas in Planes, Volumes using Integrals, Applications using Differential and Integral Calculus.

## LANGUAGE ARTS

### **Course Name: Seventh Grade English/Language Arts**

Grade: 7

Credit: 1.0

Duration: One year.

Prerequisite: None

Description: Seventh grade English incorporates literary elements such as plot, setting, character development, theme and symbolism, intertwined with a look at different cultures and writing skills. Our anthology brings to the forefront the concepts of heroism, sportsmanship and responsibility which mesh with the SMSA magnet theme.

Development of the *Art of Persuasion* is the focus of the 7<sup>th</sup> grade writing unit. A poetry unit and a research component are also included in the curriculum. Instruction places an emphasis on targeted CMT skills to ensure the academic success of our students.

Students are treated to a multi-media approach that includes art, history, music and media studies.

### **Course Name: Eighth Grade English**

Grade:8

Credit: None

Duration: Full Year

Prerequisite: None

Description: Eighth grade English incorporates literary elements such as plot, character development, theme and symbolism, intertwined with a look at different cultures and writing skills. Our anthology brings to the forefront the concepts of heroism, sportsmanship and responsibility which mesh with the SMSA magnet theme. A poetry unit as well as a research component are part of the curriculum; as well as CMT skills to ensure the academic success of our students. Students are treated to a multi-media approach that includes art, history and music.

### **Course Name: Read 180**

Grade: 7/8

Credit: None

Duration: Semester to Year Long

Prerequisite: None

Description: Read 180 is an intensive supplemental English Language Arts course designed to assist struggling readers in moving toward grade level in reading skills. The course is designed for students whose test scores and classroom-based assessment results indicate he/she is reading at one or more levels below his or her grade level. Read 180 course activities focus on expanding vocabulary skills, improving comprehension skills, and strengthening listening, viewing, speaking, and writing skills. Students will learn reading strategies using a broad range of fiction and non-fiction texts and respond both orally and in writing. They will also further develop academic writing skills by improving language mechanics and grammar usage.

**Course Name: Composition**

Grade: 9

Credit: 1

Duration: Fall/Spring Semester

Prerequisite: None

Description: English Composition is designed to strengthen basic writing skills focusing on applied grammar, sentence structure, paragraph development, and mastery of various writing structures and strategies, concluding in a freshmen thesis paper. Course content and composition topics are aligned with the school's sports and medical themes. This course challenges students to refine their approach to writing, as well as develop the necessary skills to compete in an academically rigorous environment.

**Course Objectives:**

- Develop and practice strategies to improve listening, group, test-taking, note-taking, presentation, and questioning skills.
- Develop skills focused on applied grammar, sentence structure, paragraphing, and punctuation.
- Develop writing strategies with the goal of mastering the five steps of the writing process.
- Compose various pieces of writing including: five paragraph persuasive essay, descriptive essay, news article, narrative, vignette, concluding with a freshmen thesis paper.
- Develop and master skills necessary to successfully write a response to literature.

**Course Name: English 1**

Grade: 9

Credit: 1

Duration: Fall/Spring Semester

Prerequisite: None

Course Description: English I challenges college-bound students to extend and refine their critical thinking, reading, and writing skills, through various forms of literature. This course balances analysis, discussion, composition, and applied grammar to provide students with a well-rounded foundation of skills to support future academic growth and success.

**Course Objectives:**

- Continue to develop critical reading, writing, and thinking skills
- Gain an appreciation for and understanding of literature in its various forms, including fiction, historical fiction, nonfiction, poetry, plays, and short stories
- Gain an appreciation for and understanding of individual works of literature and their connection to other works of literature, historical periods, literary movements, as well as its relevance to modern day and the lives of individual students.

Content List: Selected texts will vary by instructor and are applied to sports and medical themes whenever possible.

**Course Name: English II**

Grade: 9 (Honors) or 10 (Academic)

Credit: 1

Duration: One Semester

Prerequisite: English I

Description: English II is designed to improve students' skills in the areas of reading and writing and at the same time, prepare students for the English portions of the CAPT exam. The course consists of five main units. Each unit is accompanied by a special project, for which students work in small groups, researching a topic related to the main unit (play or novel) under consideration. Each group collaborates on the presentation of their topic to the class. Presentations must include an original piece of student artwork. Each student also must write and document a research paper pertaining to their assigned topic. Reading is assigned on a nightly basis. Reading quizzes, based on the previous night's assignment, are administered daily. S.A.T. vocabulary is addressed on a daily basis and is quizzed each Friday. A full-block exam is administered at the end of each of the five units. Grading for the course is on a "total points" basis. That is, each task is assigned a total number of possible points. A student's grade is made up of the total points earned in a semester, divided by the total possible points. The successful students will leave the course with improved reading and writing skills, as well as a firm understanding of the following concepts and literary devices, : Setting, Symbolism, Simile, Metaphor, Foreshadowing, Flashback, Soliloquy, Aside, Personification, The Play within a Play, Stichomythia, Parody, Allegory, Inference and Irony.

**Course Name: American Literature**

Grade: 10<sup>th</sup>, 11<sup>th</sup> or 12<sup>th</sup>

Credit: 1

Duration: 1 Semester

Prerequisite: English I & II

Description: American Literature is designed for students to develop competencies in the areas of understanding oral tradition in literature and the changes in the English Language, beginning with Native American Myths and continuing to the Gilded Age in American Literature. Students are expected to grasp key concepts and changes in style, linguistics and discover the importance of cultural and historical impact on an author's literary work and identify thematic links specific to American Literature. Reading and writing is required on a daily basis.

A typical semester would include the following units/works (course selections vary, based on instructor):

- Native American Myths
- *The Crucible*
- The Scarlet Letter
- The Adventures of Huckleberry Finn
- The Awakening
- The Great Gatsby

- A Streetcar Named Desire
- One Flew Over the Cuckoo's Nest

**Course Name: British Literature**

Grade: 10<sup>th</sup> Grade Honors / 11<sup>th</sup> Grade College Prep

Credit: 1

Duration: 1 semester

Prerequisite: American Literature

Description: The purpose of the British Literature course is to expose students to a variety of British literary pieces that represent the chronological evolution of literature from Anglo-Saxon/Medieval Period to Victorian Era and the 20<sup>th</sup> Century. Students survey a variety of literary styles, such as epic poetry (i.e. *Beowulf*), plays (*Macbeth*) and novels (i.e. Great Expectations). Thematically we look at the importance of storytelling, the heroes' reflection of the societies they represent and the rise of literature for the common man. This is intended as a preparation for college level thinking and providing a solid base of British Literature for future college achievement. Through the use of class discussion, reflective writing, thinking strategies (such as Bloom's Taxonomy) and taking part in creative writing and artistic pieces, students will learn how to independently decipher the literature and search for deeper meanings, and symbolism and reflect on its impact on cultural evolution.

**Course Name: Sports Journalism**

Grade: 12<sup>th</sup>

Credit: 1

Duration: 1 Semester

Prerequisite: None

Description: This course is designed to give students a deeper understanding of the career of sports journalism. The purpose of this course is to give students a strong understanding of the process behind a finished piece of sport news. Students will learn interviewing techniques, page layouts, how to write a research article with a sports theme, as well as, becoming familiar with computer programs, video recorders and cameras. Students will also learn about advertising and be involved with creating publications for school sporting events. This class is designed to teach students to understand and appreciate the history of journalism and communications in sports. Students will learn to recognize the purpose and audience for a story and the elements of an effective story. They will be able to distinguish the difference between reporting and editorializing and between print and non-print journalism. Students will understand the power of figurative language in sports journalism and the legalities and ethics involved in the field.

**Course Name: AP Literature & Composition**

Grade: 11<sup>th</sup> Grade Honors / 12<sup>th</sup> Grade College Prep

Credit: 1

Duration: 2 semesters (full year)

Prerequisite: American Literature & British Literature

Description: The purpose of the AP Literature and Composition course is to expose students to a wide variety of writing styles and use them as a vehicle to practice deeper thought and higher order thinking skills. The course incorporates rigorous amounts of both reading and writing, which students will discuss in pairs, in groups, as a class and one-on-one with the teacher. Students will take a metacognitive approach to reading and utilize thinking strategies such as Bloom’s Taxonomy. In turn, these reading and thinking skills will help students develop meaningful discussion skills and, in turn, enable students to write utilizing higher order thinking skills. Some of the writing will be in the form of essays, daily journal reflections, creative pieces (such as poetry and short stories) and letters. The formal essays will require students to write multiple drafts, edit with their peers and conference with the teacher.

The reading of this course follows thematic units and incorporates writers from a variety of backgrounds, including: Leo Tolstoy, John Steinbeck, William Shakespeare, Oscar Wilde, Julia Alvarez, Rudolfo Anaya, Mark Twain, Harriet Beecher Stowe, and John Milton. This reading will require students not only to consider the historical context of the pieces (such as the American Civil War, World War II, Victorian England, Elizabethan England, etc), but requires students to try to make connections and wrestle with the larger implications for human nature as a whole.

## SCIENCE

**Course Name: 6<sup>th</sup> Grade Science**

Grade: 6<sup>th</sup>

Duration: Year-long Course

Description: In 6<sup>th</sup> grade, all students are required to take the year long science course. The course is offered at both the academic and honors level. The 6<sup>th</sup> grade curriculum explores Earth and Physical sciences and the inquiry skills that are required for middle school students. The course begins with an introduction to the scientific method as well as integrating the science inquiry skills throughout the year.

Topics covered include: Environmental Science, Weather & Climate, and Earth Science including land formations. The students in the 6<sup>th</sup> grade science course will also perform the CMT Embedded Task titled “Dig In!”

Links to Theme:

The topics in the 6<sup>th</sup> grade curriculum include connections to the Sport and Medical Sciences school theme.

**Course Name: 7<sup>th</sup> Grade Science**Grade: 7<sup>th</sup>

Duration: Year-long Course

Description: In 7<sup>th</sup> grade, all students are required to take the year long science course. The course is offered at both the academic and honors level. The 7<sup>th</sup> grade curriculum explores Life and Physical sciences and the inquiry skills that are required for middle school students. The course begins with an introduction to the scientific method as well as integrating the science inquiry skills throughout the year.

Topics covered include: Human Body Organization & Cell Structure, the body systems such as Musculoskeletal, Cardiovascular & Respiratory and Digestive System; Physical Sciences include Motion & Acceleration, Forces, Friction & Gravity, Newton's Laws of Motion, and forces acting on different bridge designs. The students in the 7<sup>th</sup> grade science course will also perform the CMT Embedded Task titled "Feel the Beat!"

Links to Theme:

The topics in the 7<sup>th</sup> grade curriculum include connections to the Sport and Medical Sciences school theme.

**Course Name: 8<sup>th</sup> Grade Science**Grade: 8<sup>th</sup>

Duration: Year-long

Prerequisite: None

Description: In 8<sup>th</sup> grade, all students are required to take the year long science course. The course is offered at both the academic and honors level. The course begins with a brief introduction to the scientific method as well as a review of some of the basic science inquiry skills that students are expected to master in middle school. Other topics that are covered in the 8<sup>th</sup> grade science course are: energy and work, simple machines, the solar system, matter, elements and the periodic table, DNA and mitosis, reproduction and meiosis, genetics, electricity, forensic science and environmental issues. The students in the 8<sup>th</sup> grade science course will also perform the CMT Embedded Task entitled "Shipping and Sliding".

Links to Theme:

The entire 8<sup>th</sup> grade science course is centered around the school's theme of sport and medical sciences.

**Course Name: Physical Science**

Grade: 9

Level: Academic and Honors

Credit: 1 credit

Duration: Semester

Prerequisite: None

Description: This is a semester long, in depth course to introduce students to the disciplines of physical science. During this course students will study topics including properties of matter, atomic structure, acids and bases, energy, electricity and magnetism, cycles of the earth, and global interdependence. The Solar Cooker and Acid Rain CAPT embedded tasks and STS activities will be completed throughout the school year in preparation for the CAPT exam. The sport and medical science themes will be included in classroom activities and projects.

The role of the student in this course is to develop inquiry and problem solving skills within the context of scientific investigation. Students will apply what they learn to everyday situations by conducting investigations and formulating and testing their own hypotheses. Students have the opportunity, based on performance, to be selected for the Health Professions Partnership with CCSU and the UCONN Health Center where they attend lectures and complete lab activities at the college level. CAPT Science, Technology and Society (STS) explores genetically modified foods as well as analyzing the populations of developed and undeveloped countries.

Links to Theme: Scientific Inquiry, how to improve performance, the application of heat/cold to sport injuries, calculating potential and kinetic energy in sports, health impacts of acid rain/mercury/arsenic/lead

**Course Name: Biology**

Grade: 9th

Level: Academic and Honors

Credit: 1.0

Duration: Semester

Prerequisite: No prerequisite

Description: This is a semester long, in depth course to introduce you to the discipline of biology. Biology is the study of living things and their interactions. Throughout the semester we will study topics including cells, genetics, microorganisms, ecology and evolution. Our focus will be how organisms are connected by their similarities and distinguished by their differences. CAPT embedded tasks, including Enzymes and Population Dynamics, will be completed throughout the semester in preparation for the CAPT exam.

Links to Theme include:

1. CCSU/UCONN partnership – monthly field trips to either CCSU or UCONN Health Center where students are exposed to new and exciting laboratory activities.
2. Disease of the Week – students research a different disease each week investigating such things as scientific name, symptoms, transmission and treatment.

**Course Name: Chemistry**

Grade: 10

Credit: 1 academic credit and 1 lab credit

Duration: 1 semester

Prerequisite: Algebra 1 and Physical Science, Honors: Algebra 1 and Physical Science with a B or better

Description: Chemistry is the study of the properties of elements and compounds and the major types of chemical reactions undergone by elements and compounds. Students will learn about the periodicity of elements, reactivity of elements, use of the periodic table to find chemical data about elements, ionic and covalent bonding, polymer chemistry, ionic and covalent compound names and formulas, chemical equations, types of reactions, the mole, stoichiometry, and gases. Students will learn the fundamental concepts of Chemistry through inquiry-based laboratories and document their use of the scientific method in formal laboratory reports. Students will also write a formal research paper on the elements of the periodic table. Honors students will also learn about nuclear chemistry, organic chemistry, and will delve into more detail into the essential topics already described.

Links to theme: This course uses medical applications to explain the basic concepts of Chemistry in accordance with the theme of the school

**Course Name: Principles of Biomedical Sciences**

Grade: 10<sup>th</sup>

Level: Academic and Honors

Credit: 1.0

Duration: Semester

Prerequisite: Biology

Description: This course provides an introduction to the biomedical sciences through exciting “hands-on” projects and problems. The course is designed to provide an overview of all the courses in the Project Lead the Way Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses. Student work involves the study of human medicine and research processes. A theme through the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person’s life. Key biological concepts embedded in the curriculum include: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease.

Links to Theme: Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases.

**Course Name: Medical Intervention**

Grade: 11-12

Level: Academic and Honors

Credit: 1 credit with lab

Duration: 1 semester

Prerequisite: PBS and HBS A or H

Description: Medical Interventions Student projects investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care.

Links to Theme: Exploring science in action, students will work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries.

**Course Name: Biomedical Innovation**

Grade: 12

Level: Academic and Honors

Credit: 1 credit with lab

Duration: 1 semester

Prerequisite: PBS, HBS, and MI... A or H

Science Research This capstone course gives student teams the opportunity to work with a mentor, identify a scientific research topic, conduct research, write a scientific paper, and defend team conclusions and recommendations to a panel of outside reviewers.

Links to Theme: Evidence based interventions; scientific research methods; collaborative research; written and oral communication;

**Course Name: Human Body Systems-HBS**

Grade: 11-12

Level: Academic and Honors

Credit: 1 credit with lab

Duration: 1 semester

Prerequisite: Biology A or H

Description: This course will engage students in the study of the processes, structures and interactions of human body systems. Important biomedical concepts in the course include: communication, transport of substances, locomotion, metabolic processes, identity, and protection. The central theme will focus on how the body systems work together to maintain homeostasis and good health. Students will design experiments, investigate the structures and functions of body systems, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation.

Links to Theme: Exploring science in action, students will work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries.

**Course Name: Academic Physics**

Grade: 11-12

Level: Academic

Credit: 1

Duration: 1 semester

Prerequisite: Successful completion of algebra I.

Description: Physics explores the relationship between matter and energy. In Academic Physics we do this using many hands-on activities. The emphasis is on understanding how basic physics relates to the world around us as well as solving simple physics problems. To this end, the Conceptual Physics program is used, with the addition of mathematics components requiring a knowledge of algebra I.

Topics covered include: a study of motion, the relationship between motion and forces, the importance of fluids in the world and in the human body, the nature of energy, the role that thermal energy has in human ecology, and the way in which electricity is created and is utilized.

Studying physics is also a lesson in discipline. Math problems are solved using the AP Physics format, which is adapted by most schools in the United States. Students are expected to do all homework assignments and to seek extra help when needed. Physics labs are designed to transition the student into a college-level laboratory reports throughout the semester.

Links to Theme: Physics is relevant to both of our magnet themes: sports and medicine. For instance, when studying motion, we learn about the forces and the mechanics involved with playing many sports. Heat and the human body is one topic explored in the unit about thermal energy.

**Course Name: Honors Physics**

Grade: 11-12

Level: Academic

Credit: 1

Duration: 1 semester

Prerequisite: Completion of Algebra II with a B or better.

Description: Physics explores the relationship between matter and energy. The emphasis is on understanding how basic physics relates to the world around us. In Honors Physics this learning is done via demonstrations, laboratory experiences, and word problems. The level of rigor is commensurate with other high schools around the state of Connecticut.

Topics covered include: a study of motion, the relationship between motion and forces, the importance of fluids in the world, especially in the human body, the nature of energy, the role that thermal energy has in human ecology, and the way in which electricity is created and is utilized. The state standards are met in each of these topics.

Physics problems are solved in a consistent way. We use the AP Physics format, which is adopted by most schools in the United States. Students are expected to do all homework assignments and to seek extra help when needed. Physics labs are designed to transition the student into composing college-level laboratory reports throughout the semester.

Links to Theme: Physics is relevant to both of our magnet themes: sports and medicine. For instance, when studying motion, we learn about the forces and the mechanics

involved with playing many sports. Heat and the human body is one topic explored in the unit about thermal energy.

**Course Name: UCONN Biology I 1107**

Grade: 11-12

Level: AP /College Credit

Credit: 1 credit with lab

Duration: 1 semester

Prerequisite: B+ or above in Honors Biology and Honors Chemistry or approval of instructor

Description: Allows high school students to earn college-level biology credits from The University of Connecticut. Topics covered include molecular and cell biology, bioenergetics, immunity, animal anatomy and physiology. Dissection is required for the laboratory portion of the course. A scientific calculator is required. This course is open to 11<sup>th</sup> and 12<sup>th</sup> grade students.

Links to Theme: Human body systems, molecular genetics, human reproduction and essential nutrients.

Epidemiology training with UCONN Health Career opportunities program.

**Course Name: UCONN Biology II 1108**

Grade: 11-12

Level: AP /College Credit

Credit: 1 credit with lab

Duration: 1 semester

Prerequisite: B+ or above in Honors Biology and Honors Chemistry or approval of instructor

Description: Allows high school students to earn college-level biology credits from The University of Connecticut. Topics covered include ecology, evolution, genetics, and plant biology. Included in labs experience will be a field trip to examine plant samples at the University of Connecticut teaching greenhouse collections. A scientific calculator is required. This course is open to 11<sup>th</sup> and 12<sup>th</sup> grade students.

Links to Theme: Genetic counseling, Genetic diseases, Environmental medicine, and medicinal plants.

## SOCIAL STUDIES

**Course Name: World Cultures and Geography I**Grade: 6<sup>th</sup>

Credit 1

Duration: 1 semester

Prerequisite: none

Together we will explore the world by examining the diversity in culture, history, and geography. Throughout the semester we will examine four regions of the world including; Africa, Asia, the Middle East, and Europe (Greece and Rome). We will learn about the history, culture, and geography of each region while making connections between time periods. Additionally, we will develop skills that are necessary for success in the future. These include; critical thinking, mapping, graphing, interpreting, and inferring.

This course is offered at the college preparatory and honors level. Although the topics and skills covered are similar in both; the honors course examines topics in greater depth, and includes more rigorous assignments and expectations.

**Course Name: World Cultures and Geography II**Grade: 7<sup>th</sup>

Credit 1

Duration: 1 semester

Prerequisite: none

Students will continue to examine the diversity in culture, history, and geography of different regions of the world. Throughout the semester we will examine regions of the world including but not limited to North and South America and Europe. It is the goal of this class to continue to develop the skills necessary to be successful in social studies as well as in all other scholastic areas. For each region students will learn about the history, culture, and geography while making connections between historical time periods.

This course is offered for both college preparatory and honors level. Although the topics and skills covered are similar. The honors course, however, is more rigorous in terms of assignments and expectations and covers topics in greater depth.

**Course Name: U.S. History**

Grade: 8th

Credit: None

Duration: Semester

Prerequisite: None

Description:

Together we will learn about events in American history from the foundations of our nation to the Civil War. In addition we will highlight topics in geography as a means of exploring how our country came to be what it is today, and the people that make up our nation. We will learn by developing necessary skills to be successful in the future; these include, reading, writing, graphing, interpreting, debating, inferring, and discussing. It will be the goal of our class to connect what we already know with the new knowledge we gain. Topics that we will explore include; Initial Inhabitants, Various Waves of European Immigration, Slavery, Encounters with Native Peoples, The Revolutionary War, Creation of the Constitution, Early American Government, Secession, and the Civil War.

This course is offered at the college preparatory and honors level. Although the topics and skills covered are similar in both; the honors course examines topics in greater depth, and includes more rigorous assignments and expectations.

**Course Name: Global Issues**

Grade: 9th

Credit: 1

Duration: 1 semester

Prerequisite: none

**Description:**

This course fulfills a graduation requirement. This course covers a wide variety of subjects including but not limited to Global Environmental Issues, Global Terrorism, Human Rights, Global Crime, and Globalization. Students study these topics using a variety of methods and technology. We will learn by developing necessary skills to be successful in the future; these include, reading, writing, graphing, interpreting, debating, inferring, and discussing. Over the course of the semester, students will also research topics of interest and will be introduced to research and writing skills necessary for the CAPT Interdisciplinary Writing Assessment and Reading for Information while learning about history and the impact of global issues on the United States and their local community.

This course is offered for both college preparatory and honors level. Although the topics and skills covered are similar. The honors course, however, is more rigorous in terms of assignments and expectations and covers topics in greater depth.

**Course Name: Civics**

Grade: 10th

Credit: 1

Duration: 1 semester

Prerequisite: none

**Description:**

This course fulfills a graduation requirement. This course will review all aspects of the Constitutional system of government of the United States in addition to exploring

contemporary social issues. Federal, state, and local governments will be examined as well as an analysis of our entire political system. Emphasis will be placed on the following: the Bill of Rights, the amendment process, Congress – House of Representatives and Senate, the Executive Branch and cabinet, the Judiciary, political parties, citizenship and its responsibilities, and current events. Over the course of the semester, students will also research topics regarding Supreme Court cases, political parties, foreign policy, and current legislation being introduced in Congress. They will continue to focus on the writing and reading skills necessary for success on the CAPT Interdisciplinary Writing and Reading for Information Assessments. Students will also be required to take part in a mock election and a mock trial.

This course is offered for both college preparatory and honors level. Although the topics and skills covered are similar. The honors course, however, is more rigorous in terms of assignments and expectations and covers topics in greater depth.

**Course Name: U.S. History**

Grade: 11th

Credit: 1

Duration: 1 semester

Prerequisite: none

**Description:**

This course fulfills a graduation requirement. Students will analyze the social, political, and economic issues that affected America from the Reconstruction Era to the present. Some specific areas that will be covered are Reconstruction, the Gilded Age, Imperialism, WWI, the Great Depression and New Deal, WWII, the Civil Rights Movement, and the Cold War. Students will continue to develop necessary skills to be successful in college; these include reading, writing, graphing, interpreting, debating, inferring, and discussing. Time will be spent refining the writing process; focusing on developing positions, and supporting them with reasoning and examples as expected on the SAT writing prompt.

This course is offered for both college preparatory and honors level. Although the topics and skills covered are similar. The honors course, however, is more rigorous in terms of assignments and expectations and covers topics in greater depth.

**Course Name: Psychology**

Grade: 11<sup>th</sup> and 12<sup>th</sup>

Credit: 1

Duration: 1 semester

Prerequisite: none

**Description:**

This is an elective course that is recommended for those students that plan to enter the field of human services. This is also beneficial for students that plan to work with individuals in any capacity. This course is an introduction to psychology. Students will be learning a little bit about a lot of different aspects of psychology including but not limited to an introduction to psychological terms, biopsychology, life span development, learning

and cognition, personality development, motivation and emotion, and psychological disorders. Students are expected to complete hands on activities focusing on the aforementioned topics. In addition, students will continue to develop necessary skills to be successful in college; these include reading, writing, interpreting, inferring, and discussing. Time will be spent refining the writing process; focusing on developing positions, and supporting them with reasoning and examples as expected on the SAT writing prompt.

## MARKETING

### **Course Name: Marketing I**

Grade: 11

Credit: 1

Duration: Semester

Prerequisite: None

Classroom Environment: Electronic

Description: Students will explore the 9 functions of Marketing. There will be an emphasis on personal sales promotion and they will design & execute their own marketing plan for a business they create. The semester will be an exercise in marketing themselves and their ideas.

Through this course students will prepare themselves to become successful entrepreneurs, marketable employees, better students, responsible family members, and conscientious community members. There is a connection between personal motivation, succeeding in the real world and the importance of being personally and financially independent. Students will learn to think like an entrepreneur—to take risks, always be open to learning, and be empowered to take control of their lives!

Students communicate with the instructor via e-mail and the class website which is common practice in today's business environment.

Students will earn 1 business credit for Marketing I which is required for graduation.

Students will complete & present a complete business plan for a business of their choice in front of a panel of 3+ judges dressed in their business best (\*\*this is their final exam) & have the opportunity to win cash and compete at the city, state, national and even international level.

Students may be able to also have this course count as their internship with an added assignment—see the School-to-Career Counselor for this information if interested.

Students who maintain a 75% average for the course overall and present and submit a complete and acceptable business plan can earn 3 college credits from Capital Community College that are transferable to any college or university in the country.

**Course Name: Sport & Entertainment Marketing II**

Grade: 12

Credit: 1

Duration: Semester

Prerequisite: Marketing I

Classroom Environment: Electronic

Description: Students will apply the "4 P's" (Product, Price, Promotion, and Place) to investigate and solve real world case problems in the fields of Entertainment and Sport Marketing and Management.

Industry representatives from local area sport and entertainment fields are brought in as practical resources for community based projects.

Daily activities include computer research, mini projects, and sport and entertainment based case problems.

Student Expectations:

Each student is required to complete a business plan and business portfolio which acts as a plan for college preparation and beyond. Students may opt to present their business plan as a career portfolio, if they are opting for the military or other educational opportunities.

Elective activity: DECA

Students may elect to participate in the annual Sport & Entertainment Conference in Orlando, FL. At the conference students are exposed to presentations in Sport Marketing and Entertainment Marketing from industry leaders.

Students will be required to research and present a case problem solution using the Universal Theme Parks as a living laboratory. Universal Studios personnel recognize only the top projects presented from a nationwide student base.

Students are eligible to participate in Marketing- related competitions at the State and National and International levels.

**Course Name: Medical Finance**

Grade: 11& 12

Credit: 1

Duration: Semester

Prerequisite: None

Classroom Environment: Electronic

Description: Students will develop good financial habits in order to enable them to successfully make, manage, multiply, and protect their hard-earned money! Students will learn the financial skills necessary to survive in the marketplace with an emphasis on the medical field. Units covered include: medical careers, insurance, budgeting, investing, the stock market, buying their first car, credit, bank accounts, and taxes.

Course content integrates hands-on projects, as well as personal finance computer simulations. Students are expected to work individually, with a partner, and in small groups, depending on the nature of the project. Students communicate with the instructor via e-mail and the class website, which is common practice in today's business environment.

**Course Name: Media Marketing**

Grade: 11& 12

Credit: 1

Duration: Semester

Prerequisite: None

Classroom Environment: Electronic

Description: Students will investigate both digital and traditional forms of communications for the purpose of developing marketing strategies for selling advertising time in a theoretical marketplace. An emphasis will be placed on audio and video production.

Students are expected to work in a group setting to develop each of the following communications projects:

- A written project that includes advertisements, posters, schedules, and other design based communications.
- A PowerPoint presentation based upon local community or school events
- Oral presentation (radio communications) which may include a jingle or some other 30 second promotional message
- A video presentation that includes the filming of local community or school events and the editing of these activities for the possible development of student news spots on local TV.

## SPORT STUDIES

**Course Name: Health/Wellness and Physical Education**

Grade: 7 and 8

Credit:

Duration:

Prerequisite: None

Description: Topics for the 7<sup>th</sup> and 8<sup>th</sup> grade Health/Wellness course include: Character Education, Nutrition, Fitness and Wellness, Human Growth and Development, Adolescent Changes, Sexually Transmitted Diseases, HIV/AIDS, Violence Prevention, Drugs, Alcohol, and Tobacco.

In Physical Education students, will participate in a variety of individual and team activities. Students will refine basic motor skills and movement patterns into more sports related skills and strategies through units including; Soccer, Baseball/Softball, Bowling, Flag Football, Step Aerobics, Weight Room, Volleyball, Floor Hockey, Double Dutch/Rope Jumping, Hand Ball, Basketball, Badminton, Cooperative Games, and climbing Wall.

Students are required to participate in the Connecticut Physical Fitness Tests and time is spent preparing for the tests. The tests include: the Mile Run/Walk, the Partial Curl-Up Test, the Sit and Reach tests, and the Right Angle Push-Up test. These tests are measures of strength, endurance and flexibility.

**Course Name: Sport Studies I**

Grade: 9

Credit: .1

Duration: Semester

Prerequisite: None

Description: This course is designed to give students an understanding of the importance of fitness and the process in which it can be achieved. Students will examine the five fitness components, the cardiovascular the muscular systems and their relation to physical fitness. Students will be certified in American Red Cross Adult, Child, Infant CPR, First Aid and AED. A portion of the course will be spent in academic study with possible interdisciplinary units. The remainder of the time will be spent centered on physical activities such as weight training, aerobics, and game-related skills. Students will be assessed through a variety of means including quizzes, tests, projects and physical challenges.

**Course Name: Sport Studies II**

Grade: 10

Credit: .5

Duration: Semester

Prerequisite: None

Students will be able to explain the relationship between the circulatory and respiratory systems

as well as be able to identify the anatomy of the heart and lungs. Students will comprehend how exercise benefits the respiratory and circulatory systems and will be able describe different diseases of the respiratory and circulatory systems. Students will participate in the American Red Cross CPR / First Aid certification program.

**Course Name: Health**

Grade: 10

Credit: .5

Duration: Semester long

Prerequisite: None

Description: Students in the high school health course will examine a variety of issues that can impact their personal health. They will begin with an exploration of their own self concept and then investigate how outside influences such as the media, and even their own community can impact their self esteem. Students then will investigate serious issues such as violence, mental illness, and human reproduction. The course also encompasses a study of alcohol, and illicit drugs; investigating not only how these chemicals impact an individual physically, but mentally and socially. The course will conclude with an investigation of the student's personal nutritional habits. My goal for the course is that once students develop their own abilities to make informed decisions for their own health, they will then take that knowledge to advocate for their family and their communities.

**Course Name: Essentials of Strength Training and Conditioning**

Grade: 11 & 12

Credit: 1

Duration: Semester

Prerequisite: None

Description: This course is intended to cover the essentials of strength training and conditioning to prepare a student who is interested in becoming Certified Strength and Conditioning Specialist or a Certified Personal Trainer. Students will determine the scientific physiological responses and adaptations associated with strength training and conditioning in conjunction with program design and laboratory experiences. Mechanical and force/torque/work/power relationships are emphasized in laboratory demonstrations including isokinetic dynamometry, free weights, resistance machines, plyometrics, aerobic fitness, and flexibility as well as becoming certified through American Red Cross in Adult, Child and Infant CPR, AED and First Aid.

**Course Name: Fundamentals of Athletic Training**

Grade: 11 & 12

Credit: 1

Duration: Semester

Prerequisite: None

Description: This course will provide an opportunity for students to investigate a career in athletic training. Clinical observation of professionals in the field of sports medicine will be supported by lecture and demonstration of skills involved in the profession of

athletic training. The course is intended for students wishing to pursue a career in athletic training and or the sport and medical field as well as becoming certified through American Red Cross in Adult, Child and Infant CPR, AED and First Aid.

**Course Name: Introduction to Exercise Physiology**

Grade: 12

Credit: 1

Duration: Semester

Prerequisite: B or Better in Biology

Description: This class will cover the acute physiological responses and chronic adaptations to exercise. This includes neuromuscular, metabolic, cardiovascular, hormonal, and respiratory systems as they pertain to acute and chronic exercises. The major goal of the class is to develop a basic understanding of exercise physiology.

**Course Name: Principles of Coaching**

Grade: 11 & 12

Credit: .5

Duration: Semester

Prerequisite: None

Description: The classes are designed for students to examine the philosophy and practices that create good coaching. Students will study various aspects of coaching including motivation, practice planning, training, prevention of injuries and game strategy. Students will focus on a variety of skills including communication skills through teachings with fellow students and develop organizational skills by creating their own coaching handbook as well as becoming certified through American Red Cross in Adult, Child and Infant CPR, AED and First Aid.

**Course Name: Successful Sports Officiating**

Grade: 11 & 12

Credit: .5

Duration: Semester

Prerequisite: None

Description: This class is designed for students to learn the basic principles of officiating and how to apply them to specific sports. Topics covered include, Officiating objectives, conduct, communication skills, decision making skills, conflict management, time management, legal rights and responsibilities, career development fitness and injury prevention as well as becoming certified through American Red Cross in Adult, Child and Infant CPR, AED and First Aid.

## SPANISH

**Course Name: Spanish I**

Grade: 9-11

Credit: One

Duration: One Semester

Prerequisite: None

Description: This is an introductory course in which students will learn the sounds and symbols of the new language and begin developing all four basic skills: listening, speaking, reading and writing. The course stresses vocabulary acquisition and usage, sentence structure and basic grammatical principles. Since the objective of the course is to develop the students' ability to communicate in the new language, class time is devoted largely to the development of listening and speaking skills. All students will be required to listen, imitate and actively participate in all kinds of aural and oral drills. As the course progresses, they will also be required to do simple reading and writing exercises in the target language. In addition, the students in this course will have the opportunity to learn about the customs, habits, traditions, the cultural practices and expressions of the people whose language they are studying

**Course Name: Spanish II**

Grade: 9-12

Credit: One

Duration: One Semester

Prerequisite: Spanish One or Placement Test

Description: This course is a continuation of Spanish I which students will review all basic concepts studied in Level I and continue to further the development of the four basic skills: listening, speaking, reading and writing. After the review, students will go on studying the basic grammatical principles of the target language, the formation and use of different tenses and enhancing their vocabulary base. The approach used is similar to that of the first year level. The emphases continue to be on developing the ability to listen and communicate in the new language, but reading comprehension and writing skills are also stressed. The students will gain knowledge and understanding of the psychology and all culture aspects of the people whose language they are studying. Classes are conducted in the target language, except for those situations in which the teacher considers the use of English absolutely necessary.

**Course Name: Spanish III**

Grade: 9-12

Credit: One

Duration: One Semester

Prerequisite: Spanish Two or Placement Test/Teacher Recommendation

Description: This course is a continuation of the second year. Students will review all basic concepts studied in Level II and continue to further the development of the four basic skills: listening, speaking, reading and writing. After the review, students will go on studying the basic grammatical principles of the target language, the formation and use of

different tenses and enhancing their vocabulary base. The approach used is similar to that of the second year level. The emphases continue to be on developing the ability to listen and communicate in the new language, but reading comprehension and writing skills are also stressed. The students will gain knowledge and understanding of the psychology and all culture aspects of the people whose language they are studying. Classes are conducted in the target language, except for those situations in which the teacher considers the use of English absolutely necessary.

**Course Name: Spanish IV**

Grade: 10-12

Credit: One

Duration: One Semester

Prerequisite: Spanish Three or Placement Test/Teacher Recommendation

Description: This course is a continuation of Spanish 3 and it is designed for those language students that are interested in going beyond the mere college requirement. The course aims at developing the ability of the students to function effectively and to discuss a variety of contemporary issues and situations in the target language. The class will stress the use of dialogues and situations, readings and oral discussions of selected literary works (novels, poetry, short stories, and essays), presentations and writing exercises to get the students to develop the fluency and written communication skills expected at this particular level. Participation in all class activities and exercises is absolutely essential and expected of all students.

## MUSIC

**Course Name: Music Appreciation**

Grade: 6

Credit:

Duration: Semester

Prerequisite: None

Description: Music Appreciation provides the opportunity for students in the seventh grade to study the historic, social, and artistic aspects of music. It is meant to inform the student about people, places and events that have occurred in music, making it what it is today. Positive input from the students will help them explore some areas and ways of thinking they may not have considered or experienced before. This class also gives students a place to demonstrate their reading, writing, and math skills through assignments that utilize higher order thinking skills. It also gives us a place to practice demonstrating the core beliefs: Dedication, Respect, Discipline, and Responsibility. Learning about the arts opens the door to many other kinds of learning and is part of becoming a complete, literate person.

**Course Name: Instrumental Music**

Grade: 7

Credit: None

Duration: Semester

Prerequisite: Music Appreciation

Description: Learning to play an instrument can be a rewarding experience. It takes concentration, discipline, dedication and cooperation. Mastering these skills does not only apply to music. These ideals fit in with the core beliefs: Dedication, Respect, Discipline, Responsibility shared by students and staff at the school. Development of these skills can add a special dimension to any individual's life and can be a great asset in the future. Students involved in this class will be provided with the opportunity to learn how to read music and apply it to performance. Teamwork and following all rehearsal procedures will help each individual gain the most out of their experience daily.

## ART

### **Course Name: 6<sup>th</sup> Grade Art**

Grade: 6

Credit:

Duration: Semester

Prerequisite:

Description: Students in SMSA 6th grade art program will be focusing on developing their understanding of the elements and organizational principles of art. They will be provided with opportunities to select and apply various media, techniques and processes related to fine arts such as drawing, painting, printmaking, and sculpture. Students will study the artwork and artistic themes of a specific artist on a monthly basis. They will create artwork that demonstrates the influence of other master artists, as well as exploring their own personal, creative sources of inspiration. Students will be introduced to the process of art criticism a four step process in which students reflect upon , describe, interpret, and evaluate their own and others' work.

The art program will provide students with hands on art activities that integrate other 6<sup>th</sup> grade concepts in geometry, science, and literature.

### **Course Name: 8<sup>th</sup> Grade Art**

Grade: 8

Credit:

Duration: Semester

Prerequisite:

Description: Students will be exploring a continuation of the previous year's goals. They will be focusing on developing their understanding of the elements and organizational principles of art. They will be provided with opportunities to select and apply various media, techniques and processes related to fine arts such as drawing, painting, printmaking, and sculpture. Students will study the artwork and artistic themes of a specific artist on a monthly basis. They will create artwork that demonstrates the influence of other master artists, as well as exploring their own personal, creative sources of inspiration. Students will continue to develop their ability to reflect upon, describe, interpret, and evaluate their own and others' work. The art program will provide students with hands on art activities that integrate other 8<sup>th</sup> grade concepts in geometry, science, and literature.

### **Course Name: Graphic Design**

Grade: 11/12

Credit: 1

Duration: One Semester

Prerequisite: None

Description: This course is designed to allow students to obtain a general knowledge of the field of graphic design while exploring the elements and principles of composition.

Students will learn a variety of art techniques and apply them to a wide range of advertising areas such as poster design, package design, layout, and logos. Students may use a variety of computer software programs such as Adobe Photoshop, Adobe InDesign, and Adobe Illustrator while exploring ideas that relate to the school's themes of sport sciences and medical sciences. Students will make connections between artists of different eras, various cultures, daily life and their own created work. A history of graphic design will be incorporated through the reading and writing of different artists and art movements. Students are encouraged to learn terminology to be used in quizzes, critiques, assignments, and discussions, as well as, to be prepared to actively participate in group critiques. Students will work together and individually on projects that reinforce critical thinking skills and cooperative work skills in order to develop insight, understanding, and applications of technological and artistic concepts.