

CARDINAL SPELLMAN HIGH SCHOOL

Brockton, Massachusetts



Program of Studies for 2010-2011



Dear Students and Parents,

The course selection process is one of the most important opportunities in a student's high school career for shared thoughtful discussion, goal setting, analysis and effective decision-making. We encourage students to select courses which will allow them to develop their talents, challenge them intellectually, maximize their potential, and facilitate their smooth transition to the next steps in their educational development. Such serious goals require time and planning. They also demand that students make deliberate choices and live with those decisions as responsible persons. As you select courses for next year please consider how those classes fit into the entire sequence of courses you anticipate for your four years at Spellman.

All students will have occasion within the next several weeks to consult with guidance counselors, current teachers, department chairpersons and administrators so that they will be able to make informed, responsible decisions.

We call on you as parents to take the time to discuss educational goals and assist him/her in making appropriate choices. Please visit our website which will provide you with information given to students at their curriculum meetings.

If you need any assistance during this process, please do not hesitate to contact me. We want to work with you throughout this process of course selection.

Sincerely,

Dorothy Lynch
Principal

INSTRUCTIONAL LEVELS

All courses provide each student the opportunity to maximize his/her potential. Based upon realistic self-assessment, students are encouraged to select a course of study that is consistent with their current academic goals and future aspirations, as well as their motivation to succeed and put forth their best effort. The instructional levels offered at Cardinal Spellman High School are:

COLLEGE PREP: (CP) All courses provide a challenging curriculum with high expectations for student learning. These courses prepare students to become prepared for college work.

HONORS: (H) Honors level courses are designed for the superior student who has consistently demonstrated the ability and intrinsic motivation to achieve a high degree of success in a rigorous academic program. This student is also committed to continuing his/her formal academic learning in a four-year institution. Students must meet the specific prerequisites for each honor level course.

ADVANCED: (A) (Advanced English 3 and Pre-calculus) These rigorous courses are offered to juniors who will be choosing Advanced Placement English IV or Calculus.

ADVANCED PLACEMENT: (AP) Advanced Placement courses are offered in U.S. History, English IV, Modern European History, Calculus, Biology, Psychology and Studio Art. These rigorous courses provide students with the opportunity to earn college credit while still in high school if they attend one of the hundreds of colleges or universities which participate in the Advanced Placement program. In May, at the completion of the course, students take the Advanced Placement Exams developed by the College Entrance Examination Board. Students scoring a passing grade on the Advanced Placement Exam may be awarded college credit. All students taking the course are expected to take the examination in May and are responsible for the cost of this examination.

NEW COURSES BEING OFFERED 2010-2011

Journalism/Literary Criticism

Creative Writing/Self-Exploration through Literature

Mythology

Latin I

Environmental Science/Oceanography

Concert Band

AP Biology

AP Psychology

AP Studio Art

AP Modern European History

Visit www.spellman.com for additional information

INTRODUCTION

The academic program at CSHS is designed so that, with careful selection, each student may acquire the appropriate background for a successful post-secondary education.

Parents of CSHS students should assume a measure of responsibility in guiding their sons and daughters in the selection of appropriate courses, seeking the advice of the guidance counselors and/or the department chairpersons.

We urge all students to pursue a program that is as demanding and challenging as possible in order to: (1) develop their God-given talents to the fullest; (2) increase their chances for admission to college; and (3) expand their options and potential for success in college and life.

Students who limit themselves to meeting only the basic requirements in a minimal fashion may reduce their chances for admission and will find the transition to college more difficult.

CURRICULUM

All students are required to take six (6) complete courses each year. In addition, on the freshman level, a course in Physical Education is mandatory; on the sophomore level a course in Computer Skills is mandatory.

On the freshman level, the administration and department chairpersons work together to design each student's program. Qualified students are invited to participate in our Honors-at-Entrance program, which includes honors level courses in English, Social Studies, Mathematics, Science and Foreign Language.

FRESHMAN YEAR

Required: Religious Studies, English, Algebra (or Geometry), Modern World History, French 1 or Spanish 1, and Physical Education.

Electives (1): Theatre Arts, The Electronic Writer, World Cultures, Geometry Honors, Biology Honors, Physical Science, Art, Concert Band, Latin.

SOPHOMORE YEAR

Required: Religious Studies, English, Geometry (or Algebra 2), Biology (or Chemistry Honors), French 2 or Spanish 2, Computer Skills.

Electives (1): Art 1, Art 2, Concert Band, Theatre Arts, Journalism, World Cultures, Modern European History, American Government, Physical Science, Web Page Development, Latin.

JUNIOR YEAR

Required: Religious Studies, English, Algebra 2 (or Pre-Calculus or Analysis), U.S. History*, Chemistry (or AP Biology).

Electives (1): Mythology, Journalism, Psychology, American Government, 20th Century American Culture, French 3, Spanish 3, Art 2, Advanced Art, Concert Band, Latin, Introduction to Computer Programming, Web Page Development, Computer Aided Design, Anatomy & Physiology, AP Biology, Environmental Science/Oceanography, Accounting.

**This requirement may be fulfilled in the senior year with Counselor approval.*

SENIOR YEAR

Required: Religious Studies, English.

Electives (4): Creative Writing, Mythology, Psychology, 20th Century American Culture, Math 4, College Algebra and Trigonometry, Analysis, Calculus, Physics, AP Biology, Anatomy & Physiology, Forensic Science, Environmental Science/Oceanography, French 4, Spanish 4, Portfolio Art, Advanced Art, AP Art, Graphic Design, Concert Band, Accounting, Introduction to Computer Programming, Web Page Development, Computer Aided Design.

RELIGIOUS STUDIES COURSES

The Religious Studies Department aims to encourage, support, nurture and direct the student to a more mature understanding of his/her Catholic Christian heritage. The curriculum is designed so that the study of the Hebrew and Christian scriptures and Church tradition, as well as the sacraments, is the foundation for further study, understanding the paschal mystery and active participation in opportunities for faith development. Students are encouraged to integrate the academics with their lived experience, to be role models for others, to participate in prayer and worship services, to make good moral choices and to reach out in service to others consistent with the mission of the Church and Cardinal Spellman High School.

5100 INTRODUCTION TO THE CHRISTIAN MESSAGE

Gr. 9 Req.

This course provides freshmen with an overview of Catholic Christianity from sacramental, historical, doctrinal, and Scriptural perspectives. The human and moral development of the young adolescent is studied to enhance the practice of Christian living.

5200 SCRIPTURE

Gr. 10 Req.

This course examines the Bible's essential message: God loves us and desires a relationship with us. Through the use of the Hebrew and Christian Scriptures, students will study God's early attempts at relating with His chosen people and how He reveals this love most perfectly in the life, death and Resurrection of Jesus. Students will examine their present relationship with God and be challenged to foster a more intimate relationship with God through Jesus Christ.

5300 MORALITY (1 semester) Gr. 11 Req.

This course provides a conceptual understanding of Christian morality. The students explore the process for making moral decisions in the context of Christian values and are able to critique the sometimes conflicting views of our society and the world. The course exposes students to reading material, class discussion and other experiences that will help them to be open to moral growth that embraces an ethic of life and values of justice, excellence, respect, compassion and service.

SOCIAL JUSTICE (1 semester) Gr. 11 Req.

This course encourages each student to understand that the message and life of Jesus Christ calls each of His followers to live lives of loving, compassionate service to others. This call embraces especially the marginalized members of our society. The course requirements include twenty-five hours of Christian Service. There are a number of ways and opportunities that students have to complete this requirement under the direction of the Coordinator of Christian Service. It is expected that students will integrate academic learning and insights gleaned from the textbook, class instruction and group process with their field experience. The service component is a requirement of the course and a requirement for graduation from Cardinal Spellman High School.

All senior ministry courses include the integration of content from the textbook *Creating a Christian Lifestyle*.

5410 CHRISTIAN DISCIPLESHIP Gr. 12 Elect

This course is designed to offer ministerial training and practice to those students who feel called to further live out their Christian identity as disciples of Jesus Christ. Its foundation is prayer and participants will be committed to regular prayer, reading the Scriptures, faith sharing, retreat work, ministering to their peers and evangelization. This course has three components: academics, formation and ministry.

PREREQUISITE: Admission to the program is by invitation only.

**5420 ADVANCED SOCIAL JUSTICE/
COMMUNITY SERVICE Gr. 12 Elect**

This course examines the purpose and practice of ministry in building the reign of God. Analyzing social problems, learning helping skills, facilitating CSHS community involvement and implementing strategies for caring for the needs of the poor make up the course content. The academic component examines social problems from the perspectives of power, direct service and social action. Problems of poverty, homelessness and the marginalized are considered in depth. There is a required field service component consisting of direct service to the poor and the most needy.

PREREQUISITE: Admission to the program is by invitation only. Candidates must have successfully completed their Junior year Christian Service with a recommendation from their placement site and the Coordinator of Christian Service.

5430 ADORATION MINISTRY **Gr. 12 Elect**

This course is designed to offer ministerial training to students. There are opportunities throughout the year for students to be actively involved in planning and leading community prayer experiences including First Friday adoration services. Also a part of this ministry course is the design, planning and leading of the celebration of Catholic Schools Week. This is a peer leadership program and its foundation will be prayer, Scripture study and faith sharing.

5440 LITURGICAL ARTS MINISTRY **Gr. 12 Elect**

This course includes a survey of different forms of prayer and provides some practical experience with expanding the student's relationship with God through various forms of prayer. There are opportunities throughout the year for students to be actively involved in planning and facilitating community prayer experiences, particularly liturgy planning. Through a process of formation and training students will utilize and develop personal gifts in art, music and drama as well as organizational and computer skills. Roles will include weaving liturgical themes throughout school programs and activities, creating prayerful and sacred space, integrating music and art and preparing power point and song word sheet programs.

5460 LIFE MINISTRY **Gr. 12 Elect**

This ministry course will provide an opportunity for students to get involved in a variety of activities that support and celebrate life from womb to tomb. Students will minister to the school community and society in their personal witness and by ways of direct service and/or social action. Activities include supporting life from the moment of conception, planning the November Service of Remembrance and offering an educational program in conjunction with SADD before prom season.

5480 MISSION MINISTRY **Gr. 12 Elect**

This course is designed to offer ministerial training and practice for those students who feel called to live out their Christian identity by helping and leading others to Christ through service opportunities for their church, their community and their world. Individuals in this class could choose projects of interest to them which best utilize their God given gifts and talents. This course has its foundation in prayer, Scripture study and faith sharing, thereby living out the Mission statement of CSHS.

5490 HEALING MINISTRY **Gr. 12 Elect**

This course includes an exploration of different forms of prayer and invites students to enter into a deep and prayerful relationship with Jesus Christ. There will be opportunities to share God's mercy with other students in a variety of prayer and healing services. The class will examine life choices in regards to Christian lifestyles and vocations.

ENGLISH COURSES

Four years of English are required with the expectation that the students will be equipped to: (1) comprehend, interpret and evaluate what they read; (2) write well-organized, effective papers; (3) listen effectively and discuss ideas intelligently; and (4) know our literary heritage and how it relates to the customs, ideas and values of today's life and culture.

1100 ENGLISH 1 **Gr. 9 Req.**

English 1 is designed to aid students in the development of skills in five areas: reading, composition, usage, vocabulary and introductory literary analysis. Techniques of writing a research paper are introduced.

1101 ENGLISH 1 HONORS **Gr. 9**

A more intensive treatment of the topics covered in English 1. Students are exposed to literary themes taken from the classics. Techniques of writing a research paper are introduced.

1500 THEATRE ARTS **Gr. 9, 10**

This course explores basic techniques of acting, projection, voice and body control, diction and expression. Students will utilize these skills in their individual classroom performances. Other topics include make-up and set design. Students will design a set as part of their class project.

1510 THE ELECTRONIC WRITER **Gr. 9**

A student-centered, hands-on, workshop approach to using the computer as a writing tool. Because writing is part of a larger communication process, involving visual as well as verbal signals, students learn the writing process as well as typographics, page layouts and graphic capabilities to design and publish various documents using a desktop publishing program.

NOTE: Due to space limitations, enrollment will be approved on a first-come first-served basis.

1200 ENGLISH 2 **Gr. 10 Req.**

Reviews literary genres using classical and contemporary selections. Aims to increase competency in reading, writing, speaking, listening and analyzing. Stresses the mechanics of good written communication. Introduces research skills for a source paper. Course requirements include a term paper.

1201 ENGLISH 2 HONORS **Gr. 10**

A more intensive study of the literary genres for the motivated English student. Frequent written themes are expected. Course requirements include a term paper.

PREREQUISITE: B+ average in English 1; 3.0 GPA; department approval.

1520 JOURNALISM/LITERARY

CRITICISM (New Course) Gr. 10, 11

Journalism introduces students to the basic principles of publishing, including writing articles, feature stories and editorials. Students will utilize these skills through class projects that include publishing the school newspaper, creating magazines and acting out news programs based on current events. Literary criticism will critique different forms of literature such as short stories, essays and poetry. Students will learn to compose reviews and essays based on the literature studied.

1300 ENGLISH 3

Gr. 11 Req.

A thematic approach to the study of American literature. Includes a review of usage, vocabulary and writing skills, techniques of writing a research paper and SAT preparation. Course requirements include a term paper.

1301 ENGLISH 3 HONORS

Gr. 11

A more intensive treatment of American literature. Frequent written assignments demanding critical thinking and organized response; SAT preparation; techniques of writing a research paper. Course requirements include a term paper. **PREREQUISITE:** B+ average in English 2; above average verbal skills as demonstrated in standardized testing; department approval.

1302 ADVANCED ENGLISH 3

Gr. 11

Designed to assist students in cultivating their analytical higher level thinking skills. Students will practice critical thinking, sophisticated compositional techniques and literary analysis training. The nature of this course requires that class size be limited. Course requirements include a term paper.

PREREQUISITE: A- average in previous English courses; above average verbal skills as demonstrated in standardized testing; writing sample; effective class participation; department approval.

1550 MYTHOLOGY

(New course) Gr. 11, 12

Mythology affords the student the opportunity to become acquainted with some of the world's greatest myths. Topics include stories of creation, fertility, heroes and the influence of these myths on western civilization and literature.

1400 ENGLISH 4

Gr. 12 Req.

The first semester will include a survey of Anglo-Saxon, medieval and Elizabethan literature. Special emphasis on *Beowulf*, *Canterbury Tales* and the works of Shakespeare. SAT preparation.

The second semester concentrates on literature from the Seventeenth to the Nineteenth Centuries. Special emphasis on the Metaphysical and Cavalier Poets, Milton, as well as Romantic and Victorian writers. Reflective and analytical writing assignments constitute an integral part of this course. Course requirements include a term paper.

1401 ENGLISH 4 HONORS

Gr. 12

A more intensive treatment of British literature; weekly writing assignments demanding critical thinking and organized response; SAT preparation. Course requirements include a term paper.

PREREQUISITE: B+ average in English 3; above average verbal skills as demonstrated in standardized testing; department approval.

1403 ADVANCED PLACEMENT ENGLISH

Gr. 12

Intended to prepare highly qualified students for the Advanced Placement Examination in English. Students will be required to analyze, discuss and critique major works of literature. The nature of the course requires that class size be limited. A reading list will be provided in the spring to allow the student time for initial reading during the summer. Course requirements include a term paper. Student-financed AP Exam is required.

PREREQUISITE: successful completion of Advanced English 3; department approval.

1530 CREATIVE WRITING/SELF-EXPLORATION THROUGH LITERATURE

(New course) **Gr. 12**

An integrated course of storytelling and exploring oneself through literature. Creative writing emphasizes techniques used in writing the composition, the article, the essay, etc., stressing techniques in writing poetry, short stories and drama. Students are required to keep a literary journal for daily entries. Self-exploration emphasizes our unique reactions to the characters in stories and novels and how this can increase our understanding of self. We'll use contemporary works by Robert Cormier, Stephen King, Toni Morrison and others as points of departure for our discussions as we explore the questions: What are our feelings and attitudes about the story characters, and what do these emotional responses reveal about ourselves?

PREREQUISITE: Writing sample; department approval.

SOCIAL STUDIES COURSES

The Social Studies Department prides itself in developing students to analyze and rethink critical issues of the past and how to integrate these solutions into our diverse world of the twenty-first century. The major focus of the Social Studies Department is to effectively broaden the *thinking, writing and analytical skills* of our students. Students will meet the educational requirements in Massachusetts for history through the outlined scope of courses offered here at Cardinal Spellman.

Three years of Social Studies are recommended in order to accomplish these goals.

7100 MODERN WORLD HISTORY Gr. 9 Req.

An overview of history from the Renaissance through World War II. This course emphasizes the increasing importance of science and technology, the growth and problems of cities, the development of different models of government, imperialism, the interdependence of countries, economic and social change and the rise of democracy.

7101 MODERN WORLD HISTORY HONORS Gr. 9 Req.

Focusing on the development of the modern world from the Renaissance to the twentieth century, this course will investigate major themes such as the development of democracy and the concept of the individual, industrialization, the growth of modern nations and conflict and peace in the twentieth century. The student will be expected to read extensively, learn basic research methods and write several papers each semester.

7500 WORLD CULTURES Gr. 9, 10

This course will enable students to study and appreciate the diverse cultural traditions of the world. With an emphasis on the daily routines of people around the world, students may appreciate the uniqueness of other societies; the social conditions, religious beliefs and economic conditions that shape their country. The Middle East, Southeast Asia, Africa, Europe, Russia, China and Japan will be the focal points of the course.

7511 MODERN EUROPEAN HISTORY HONORS Gr. 10

This course will trace the unique development of European Civilization by examining the social, political, economic and religious struggles of these nations. Students will gain critical insights as they trace the evolution of these civilizations that have influenced and defined the modern world today. Successful completion of this course, along with teacher recommendation, will provide students with the necessary academic background for admission to Advanced Placement History in Grade 11.

PREREQUISITE: B+ average in previous social studies courses; above average verbal skills as demonstrated in standardized testing; department approval.

7513 ADVANCED PLACEMENT MODERN EUROPEAN HISTORY (New course) Gr. 10

This AP course in Modern European History is intended for qualified students expected to demonstrate a knowledge of basic chronology and of major events and trends from the High Renaissance Period (1450) to the present. This course will introduce students to cultural, economic, political, and social developments that played a fundamental role in shaping the world through these years. Students will be on task to learn and develop various themes in

Modern European history as well as gain the ability to analyze historical evidence and historical interpretation. Students are expected to express their understanding and assessments of historical data through their developing writing skills.

Student-financed AP Exam is required. Students may receive college credits upon successful performance on the AP exam in May.

PREREQUISITE: A– average in previous Social Studies and English courses; department approval.

7300 UNITED STATES HISTORY **Gr. 11 Req.**

This is a survey course where students will examine the growth of American society through its presidential administrations. Students will analyze various historical themes that have affected the development of this country. The scope of the course will cover events from Colonial America to the Cold War after World War II.

7301 UNITED STATES HISTORY HONORS **Gr. 11**

An in-depth examination of American history from the early colonial period through World War II, designed for students with advanced reading comprehension and writing skills. Outside readings and research projects will be emphasized.

PREREQUISITE: B+ average in previous social studies and English courses; department approval.

7303 ADVANCED PLACEMENT U.S. HISTORY **Gr. 11**

This course will concentrate on the study of the various periods and developments of American institutions. The course includes extensive reading, a research paper, use of analytical papers, book reviews and various case studies. Students will be required to take the Advanced Placement Examination in United States History. This course has been approved by the College Board and students may receive college credits upon successful performance on the AP exam in May.

PREREQUISITE: A– average in previous History and English courses; above average verbal skills as demonstrated in standardized testing; recommendation of History and English teacher; department approval.

7520 AMERICAN GOVERNMENT **Gr. 10, 11**

This course seeks to increase the political knowledge and sophistication of the student who is about to vote. This course will examine the U.S. Constitution in depth. Emphasis will be placed upon the roles, recruitment and decision-making powers of the President, Congress and Supreme Court. The rights and responsibilities of American citizens will be examined. Current events will be discussed and integrated throughout the course.

7530 AMERICAN CULTURE IN THE 20th CENTURY

Gr. 11, 12

The evolution of American Film, Music and Art in the 20th century will be examined by students from a historical perspective. Students will explore how these media forms as well as propaganda techniques affected and shaped American society. A research project is required.

7540 PSYCHOLOGY

Gr. 11, 12

Explores the history, theory and current issues in psychology. Major topics include: learning, perception, human development, motivation, emotions, personality, behavior and behavior disorders. The “*Baby Think It Over: Reality Works*” program is a part of this class.

7543 ADVANCED PLACEMENT

PSYCHOLOGY

(New course) **Gr. 12**

As outlined by the College Board, Advanced Placement Psychology introduces students to the systematic and scientific study of the behavior and mental processes of the human mind as well as of other animals. Students will be exposed to the psychological facts, principles, and phenomena associated with each of the major sub-fields within psychology (neuroscience, development, learning, personality, etc.). Students will also learn of the various methods that psychologists use in their research and study. This course requires independent reading, projects, hands-on experiments, and extensive class participation. Emphasis will be placed on the ability to think, read, and write in a critical fashion.

Students must take the Advanced Placement examination at the completion of the course in May.

Prerequisite: A– average in previous Social Studies and English courses; department approval.

MATHEMATICS COURSES

The Mathematics department aims to “equip students to: (1) understand algebraic and geometric concepts; (2) understand elementary probability and statistics; (3) apply mathematics in everyday situations; and (4) estimate, approximate, measure and test the accuracy of their calculations.”

CSHS students must take at least three, and preferably four years of college preparatory mathematics.

2100 ALGEBRA 1

Gr. 9 Req.

A modern course in elementary algebra. Includes: concept of real numbers, linear equations, polynomials, factoring, quadratics, the four basic operations with fractions, fractional equations, graphing linear equations and inequalities.

2101 ALGEBRA 1 HONORS **Gr. 9**

A more intensive treatment of the topics covered in Algebra 1. This course is designed for highly qualified students and/or students with substantial previous Algebra experience.

2200 GEOMETRY **Gr. 10 Req.**

This is a course in Euclidean geometry in which the properties of geometric figures and their relationships will be examined. Course content will also include formal proofs and coordinate geometry.

2201 GEOMETRY HONORS **Gr. 9, 10**

For freshmen and sophomores with high math ability, interest and motivation. Blends space and coordinate geometry with a contemporary treatment of plane geometry. Grade 9 Honors at Entrance and/or approval of department chair.

Grade 10 **PREREQUISITE**: average of A– in Algebra 1 and approval of department chair.

2300 ALGEBRA 2 **Gr. 11 Req.**

A review and extension of topics begun in Algebra 1. Additional topics include: negative, fractional and zero exponents, quadratic relations and systems, theory of quadratic equations, logarithms, irrational and complex numbers and problem solving.

2301 ALGEBRA 2 HONORS **Gr. 10, 11**

Reviews and extends topics and techniques of Algebra 1. Additional topics include: negative, fractional and zero exponents, radical equations, polynomials of higher degree, rational functions, transformations of graphs and considerable verbal problem solving. Course proceeds more rapidly and in greater depth than 2300.

PREREQUISITE: average of A– in Algebra I and/or Geometry and approval of department chair.

2302 PRECALCULUS **Gr. 11**

Designed for students who have completed Algebra 2 Honors in Grade 10. Topics include: polynomial, rational, exponential and logarithmic functions, trigonometry and its applications, concepts of limits and derivatives and an introduction to Calculus. Advanced Course Credit is earned for this course.

PREREQUISITE: average of B– in Algebra 2 Honors; approval of department chair.

2400 MATH 4 **Gr. 12**

A review of concepts from Algebra and Geometry required to be successful in a college Math I course. Confidence building and improving reasoning and critical thinking skills will be a major focus of this course.

PREREQUISITE: approval of department chair.

2410 COLLEGE ALGEBRA AND TRIGONOMETRY

Gr. 12

Designed to prepare students for work in college mathematics. The course provides a strengthening of mathematical skills and a thorough study of trigonometry. Concepts from Algebra include quadratic equations and functions, exponential and logarithmic functions, sequences and series, and probability. Recommended for college-bound students of average mathematical ability.

PREREQUISITE: average of C– in Algebra 2; approval of department chair.

2421 ANALYSIS HONORS

Gr. 11, 12

A more rigorous math course. Provides an excellent preparation for college math. Topics include: an in-depth review and extension of Algebra 2, exponential and logarithmic function, Trigonometry and introduction to Calculus.

PREREQUISITE: average of B in Algebra 2; approval of department chair.

2431 CALCULUS HONORS

Gr. 12

This course is intended for those students who have a thorough knowledge of college preparatory mathematics. Topics include a review and extension of Analysis and Trigonometry. This course parallels a freshman college course in Calculus, emphasizing the techniques and practical applications of integration and differentiation.

PREREQUISITE: average of C+ in Algebra 2 Honors and Precalculus or average of B+ in Algebra 2 and Analysis; approval of department chair.

2433 ADVANCED PLACEMENT CALCULUS

Gr. 12

For the superior math student considering a career in math or one of the natural sciences. A college-level course. The curriculum for this course is based on the College Board Standards. Student-financed AP Exam required.

PREREQUISITE: average of B– in Algebra 2 Honors and Precalculus; approval of department chair.

SCIENCE COURSES

All CSHS students must take course work in both the biological and chemical sciences. In addition to Biology and Chemistry, students must take a third year of science in order to meet the Massachusetts state college requirements. Physics is strongly recommended for all students pursuing science and/or math as their college major.

3100 PHYSICAL SCIENCE

Gr. 9, 10

This course will introduce the major topics of physics and chemistry, covering topics such as: scientific method, atomic structure, forms of energy, sound, light and the human body's energy needs. Concepts will be reinforced with hands-on, collaborative laboratory experiments.

3200 BIOLOGY **Gr. 10 Req.**

This laboratory course emphasizes the structure and function of various forms of life. Topics include biology, genetics, classification, invertebrate/vertebrate structure and function, and an introduction to human anatomy and physiology.

3201 BIOLOGY HONORS **Gr. 9, 10**

A laboratory course, geared toward a deeper understanding of life processes from the simplest cell level to the most complex level. Concentrates on: cytology, genetics, invertebrate/vertebrates, environmental relationships and anatomy and physiology. Research is a vital part of this course.

Grade 9 Honors at Entrance; approval of department chair. Grade 10 **PREREQUISITE:** G.P.A. of 3.33 or better; grade of B+ in previous math courses; approval of department chair.

3300 CHEMISTRY **Gr. 11 Req.**

This laboratory course develops a knowledge of the basic concepts, skills, principles and processes of chemistry. Includes the fundamental topics: structure of the atom, chemical bonding and reactions, kinetics, equilibrium and chemical calculations.

3301 CHEMISTRY HONORS **Gr. 10, 11**

This laboratory course presents the principles of chemistry at a more sophisticated level than in 3300. Research is a vital part of this course.

PREREQUISITE: grade of B+ in previous math and science courses; approval of department chair.

3400 PHYSICS **Gr. 12**

A laboratory course recommended for students pursuing a math/science related degree or career. Topics include: force, motion, light, sound, temperature, thermal energy and electricity.

PREREQUISITE: grade of B- in previous math courses; grade of C+ in previous science courses; approval of department chair.

3401 PHYSICS HONORS **Gr. 12**

A more intensive treatment of the topics included in 3400. Research is an integral part of the course.

PREREQUISITE: grade of B+ in previous math courses; grade of B- in previous science courses; approval of department chair.

3440 FORENSIC SCIENCE **Gr. 12**

This course is an introduction into the world of forensic science. There will be laboratory work relating to most topics. These include investigating the crime scene, physical evidence, fingerprints, DNA, ballistics, forensic toxicology, document examination and careers in forensic science.

**3450 ENVIRONMENTAL SCIENCE/
OCEANOGRAPHY (New course) Gr. 11, 12**

This course will explore the interrelationships between the earth's ecosystem and all of its organisms. Emphasis will be placed on ecology, natural resources, population dynamics and conservation as well as the pros and cons of environmental issues such as global warming. A substantial portion of the course work will emphasize the physical, biological and social aspects of the marine environment. Topics will include oceanography, invertebrate and vertebrate zoology, marine botany and ocean exploration.

3420 ANATOMY AND PHYSIOLOGY Gr. 11, 12

A systematic survey of the structure and function of the human body. By studying the design of the body, students will be able to understand the physical and chemical functioning of the various systems. This course is designed as a detailed introduction for those students thinking of entering the medical field. (Doctor, nurse, sports medicine, physical therapy, lab technician, EMT).

PREREQUISITE: grade of C+ in Biology and Chemistry courses; approval of department chair.

**3421 ANATOMY AND PHYSIOLOGY
HONORS Gr. 11, 12**

A more intensive treatment of topics covered in course 3420. Additional course work and independent work are required of students.

PREREQUISITE: grade of B+ in Biology and Chemistry courses; approval of department chair.

**3433 ADVANCED PLACEMENT
BIOLOGY (New course) Gr. 11, 12**

A college level laboratory course geared to intensive study of cells, energy and enzymes, taxonomy, genetics, botany and ecology. Research is an integral part of this course. The curriculum for this course is based on the College Board Standards. Student-financed AP Exam required. Due to the advanced level of this course enrollment is limited.

PREREQUISITE: grade of A- in Biology and Chemistry; approval of department chair.

LANGUAGE COURSES

Competency in a modern or classical language is an essential part of a good education. It is recommended that students take three or four years of a foreign language in order to achieve the proficiency required of college preparatory students.

4100 FRENCH 1 Gr. 9

Includes a mastery of basic grammar, idioms and vocabulary, and stresses correct pronunciation and inflection. Reading comprehension developed.

4101 FRENCH 1 HONORS **Gr. 9**

Parallels 4100 in content. Material covered more rapidly and in greater depth.

4200 FRENCH 2 **Gr. 10**

Continues work done in French 1. Basic grammar developed through listening, speaking, reading and writing. Guided composition initiated.

4201 FRENCH 2 HONORS **Gr. 10**

Continues basic skills and structures at a rapid pace. Oral and written reports. Reading and listening comprehension is developed.

PREREQUISITE: average of B+ in French 1 Honors; approval of department chair.

4300 FRENCH 3 **Gr. 11**

Continued mastery of more difficult idioms and structures. Oral and written reports required. Oral proficiency stressed. Classical and contemporary readings introduced.

PREREQUISITE: average of C in French 2; approval of department chair.

4301 FRENCH 3 HONORS **Gr. 11**

A more intensive treatment of 4300.

PREREQUISITE: average of B+ in French 2 Honors; approval of department chair.

4400 FRENCH 4 **Gr. 12**

Reviews main elements of structure. Focuses on mastery of speaking and writing skills. Reading includes selections from French literature.

PREREQUISITE: average of C+ in French 3; approval of department chair.

4401 FRENCH 4 HONORS **Gr. 12**

A more intensive treatment of topics in 4400.

PREREQUISITE: average of B+ in French 3 Honors.

4140 SPANISH 1 **Gr. 9**

Basic grammar, oral expression, listening comprehension, elementary reading and introduction to the culture of the Spanish speaking world. Sound system and inflection developed through dialogue. Students are grouped according to background and ability.

4141/4151 SPANISH 1 HONORS **Gr. 9**

Parallels 4140 in content. Material covered more rapidly and in greater depth.

4240 SPANISH 2 **Gr. 10**

Continues work done in Spanish 1. Basic grammar developed through listening, speaking, reading and writing. Guided composition initiated.

4241 SPANISH 2 HONORS **Gr. 10**

Develops ability to understand, speak, read and write Spanish on an intermediate level and at a rapid pace. Spanish literature introduced.

PREREQUISITE: average of B+ in Spanish 1 Honors; approval of department chair.

4340 SPANISH 3 **Gr. 11**

More difficult language patterns, grammatical constructions and idioms. Oral and written reports required. Some reading of Spanish literature.

PREREQUISITE: average of C in Spanish 2; approval of department chair.

4341 SPANISH 3 HONORS **Gr. 11**

Parallels 4340 in content. Material covered more rapidly and in greater depth.

PREREQUISITE: average of B+ in Spanish 2 Honors; approval of department chair.

4440 SPANISH 4 **Gr. 12**

Review of grammatical structure. Develops speaking and writing skills through discussion of Spanish literature and culture.

PREREQUISITE: average of C+ in Spanish 3; approval of department chair.

4441 SPANISH 4 HONORS **Gr. 12**

An in-depth review of more difficult grammatical and stylistic structures. Develops speaking and writing skills through selected readings of Spanish masterpieces and discussion of traditional and contemporary Spanish culture.

PREREQUISITE: average of B+ in Spanish 3 Honors; approval of department chair.

4170 LATIN I *(New course)* **Gr. 9, 10, 11**

Provides basic Latin vocabulary and grammar skills. Includes material on Roman life and culture. Increases the students' awareness of Latin as an aid to a better understanding of history, western civilization and English derivatives. Excellent background for the study of other foreign languages.

FINE ART COURSES

It is important that college-bound students understand and appreciate the unique contribution of the arts to society and that they develop aesthetic sensibilities through the study of one or more of the following: visual arts, theatre, music or dance.

6100 ART 1 **Gr. 9, 10**

An introductory course intended to expose the student to a variety of media with emphasis on the principles and elements of design, art history, computer art, color theory and observational drawing. Students are encouraged to discover and/or further develop their creative gifts through many rewarding studio experiences.

NOTE: Due to space limitations, enrollment will be approved on a first-come first-served basis.

6200 ART 2 **Gr. 10, 11**

Provides art students with the opportunities for developing visual perception, organization and manipulative skills in expressing ideas.

PREREQUISITE: average of C in Art 1 and approval of department chair.

6400 ADVANCED ART **Gr. 11, 12**

For serious art students who are interested in the practical experience of art. Work consists of completing pieces suitable for the art college portfolio. The program stresses three concerns: quality, concentration and breadth of experience.

PREREQUISITE: average of B in Art I and Art 2 (or comparable outside courses and/or lessons) and approval of department chair.

6403 ADVANCED PLACEMENT ART
(New course) **Gr. 12**

The AP Studio Art Program is sponsored by the College Board. AP policies and requirements are determined by representatives of College Board member institutions throughout the country. The program allows colleges to evaluate and award a student's work by granting college-level credit and/or placement. The course can also serve students who want to prepare for college, art school or a career in art.

PREREQUISITE: department approval.

6410 GRAPHIC DESIGN **Gr. 12**

A basic course in creativity, design and visual communication. Topics include: an introduction to typefaces, layout, photography and copy preparation. Students experience hands-on work in publishing through the development of their yearbook.

PREREQUISITE: approval of application by instructor.

6421 PORTFOLIO ART HONORS **Gr. 12**

For students who have successfully completed Advanced Art. Many aspects of the creative process will be explored, including drawing, painting, design and sculpture. Student will be required to complete extensive independent work.

PREREQUISITE: approval of department chair.

6500 CONCERT BAND
(New course) **Gr. 9, 10, 11, 12**

This course is designed for students who play a musical instrument and would like to enhance this skill. Students will develop skills in reading music and performing in a group.

BUSINESS COURSES

The business department aims to give college-preparatory students an exposure to business education courses in hopes that the skill and knowledge gained will be helpful to college-bound students and those interested in the business world.

9700 ACCOUNTING

Gr. 11, 12

Introduction to basic accounting principles and practices and the basic techniques used in the analysis of financial transactions.

PHYSICAL EDUCATION COURSES

Physical Education at Cardinal Spellman reflects the assumption that healthy minds and healthy bodies are essential to meet the challenges of life. In general the program stresses physical fitness and motor skill acquisition, provides social interaction, and promotes recreational as well as intellectual competencies.

8100

8110 PHYSICAL EDUCATION

Gr. 9 Req.

A basic course in Physical Education which stresses the importance of lifelong physical fitness while involving students in individual and team activities.

COMPUTER COURSES

The Computer Department aims to provide students with the skills to be able to use the computer for gathering information, organizing that information in a meaningful way, and communicating that information to others in a variety of ways. As our world moves further into an information and communication based society, we want all of our students to be able to function in such a post-secondary school setting. All members of the Sophomore class will take a computer skills component during their seventh mod to enhance and apply their computer word processing, spreadsheet, research and keyboarding skills by building an electronic portfolio of projects across the sophomore curriculum.

9100 INTRODUCTION TO COMPUTER

PROGRAMMING USING VISUAL BASIC

Gr. 11, 12

This is a first course in computer programming that provides students with the knowledge and skills needed to develop computer applications in Visual Basic. Microsoft has put VB as the core application programming language into their application products like Word, Excel, PowerPoint, etc. This is **not** a course in *using* computer applications such as word processing or spreadsheets but a course in the behind the scenes work that *creates* such application software. The course also provides a great opportunity to develop logic and analytical skills.

The major topics of the course include variable and assignment statements, strings, If statements, and loops. Students write interactive programs that respond to user events such as mouse-clicks and key presses. In addition, the course will include event and function procedures. Students will see how VB may be used in Microsoft Office applications.

PREREQUISITE: B– or better in previous math courses; approval of department chair.

9200 WEB PAGE DEVELOPMENT Gr. 10, 11, 12

Students will learn basic to intermediate HTML, Flash, Dreamweaver and Fireworks skills, helping to create dynamic web sites with interactivity and animation. They will be expected to produce an electronic portfolio and web site of their work that provides support for understanding of the material in the syllabus. Students will also be able to expand on their Microsoft Office Skills by completing a series of exercises involving advanced topics.

PREREQUISITE: approval of department chair.

9250 APPLIED COMPUTER SKILLS Gr. 10 Req.

Students will review and expand upon their keyboarding, file management, word processing, spreadsheet, research and presentation skills using Microsoft Office to produce a portfolio of projects for use across the sophomore curriculum. The course will also consider aspects involving the ethical use of computers. In conjunction with the guidance department, students will be enrolled in MyRoads and use it to explore careers, disciplines and colleges. This class meets three times per cycle.

9300 COMPUTER AIDED DESIGN Gr. 11, 12

This introductory AutoCAD course will provide students with a hands-on computer experience exploring the basic methods of constructing 2D and 3D modeling. Students will learn the steps required in the design process. This software is used by architects, engineers, interior and landscape designers.

PREREQUISITE: approval of department chair.

VIRTUAL HIGH SCHOOL

Cardinal Spellman High School is a member of Virtual High School, an online learning community for secondary students. Through this membership CSHS is able to provide select students access to approved courses that are not currently offered at CSHS. Participation is restricted to juniors and seniors. Students are required to work independently under the supervision of CSHS faculty.

“VHS is a non-profit collaborative of partner schools throughout the U.S. and around the world that expands learning opportunities for teachers and students through online education.” *If you wish to learn more about Virtual High School, visit www.govhs.org*

PREREQUISITE: VHS application; VHS selection committee approval.

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