

St. Thomas Aquinas High School

Program of Studies

2020-21



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St. Thomas Aquinas High School

General Academic Information 2020-21

Schedules

After the first semester students register for courses for the upcoming school year. Recommendations for course assignments come from department chairpersons. Students are advised of these recommendations by the school counselors and are assisted in choosing elective courses. Students are encouraged to discuss all recommendations with their parents and teachers. A preliminary course schedule is distributed to students shortly after registration and must be returned to the counseling department with a parent's or guardian's signature.

Since scheduling involves additional time and data processing expense, any schedule change made after April 15 requires a fee of \$15.00. Before changes are made, approval must be obtained from the counseling director. In some cases, the approval of the principal must be obtained.

Every effort is made to honor schedule requests. However, in case of unresolved conflict, the student is consulted for alternate choices.

Graduation Requirements

The minimum requirements for graduation are 130 credits. Subjects required for graduation are the following:

Religion	4 years
English	4 years
Physical Ed./Health	4 years
Mathematics	4 years
Science (Biology, Chemistry, Physics)	1 year each
World History	1 year
U.S. History	2 years
Foreign Language	2 years (3 recommended)
Fine Arts	1 year
Computer Science	1 year
Career Education	2 Quarters
Financial Literacy	1 Semester

Additional Graduation Requirements

All students must pass each section of the IOWA Test of Educational Development (ITED) which is equivalent to the New Jersey High School Proficiency Assessment (HSPA).

Honors Program

A student in an Honors course must maintain the course average as specified by each department in this Program of Studies. There are additional program requirements.

College Courses

Occasionally a student may elect to take a course, or courses, at a local college. All such courses must be pre-approved by the counseling director. These classes, taken for credit in a college, are indicated on the official transcript but are not calculated in the grade point average (GPA).

Failures

A student who fails a subject for the year must repeat and pass the subject; failing grades cannot be carried into the next school year. Students may take the failed course in summer school or through private tutoring with an instructor certified in that subject area. Failure in summer school will result in automatic dismissal.

The summer school grade appears on the transcript. However, a grade of "D" is used to compute the GPA. Any student failing two (2) major subjects for the year may be asked not to return to St. Thomas Aquinas High School. This decision is made by the school administration.

The administration reserves the right to ask a student to withdraw from the school under the following circumstances related to failures:

1. Any student on academic probation if any subject is failed during the probation period.
2. Any student who fails a subject(s) in consecutive years.
3. Any student who fails (2) or more subjects in one academic year.

Student Progress and Information

Parent-teacher-administration communication is enhanced through PowerSchool®, an Internet-based application from PowerSchool® that allows students as well as parents and guardians to view academic performance online.

The St. Thomas Aquinas High School community believes that parental involvement leads to better student development and performance. By visiting St. Thomas Aquinas's password-protected PowerSchool site, at any time, parents can access student information, check on grades, monitor attendance, view discipline reports and more. Course progress is current with a view of each teacher's grade book for all tasks, tests, homework and project grades on an ongoing basis.

Report Cards

Report cards are distributed at the end of the school year. Student progress may be viewed at any time throughout the school year through PowerSchool

Science

Biology/Lab (120)

Credits: 6; Years Offered: 9

This course presents science through inquiry and develops an appreciation of the characteristics, complexity and diversity of living organisms. Students are introduced to various approaches and techniques of biological research emphasizing the ongoing nature of science. Scientific thinking is encouraged through experiment and problem solving. Topics covered include the history of biology, evolution, cellular structure/ activities, DNA, genetics and a general survey of the phyla of the six kingdoms.

Biology Honors/Lab (122)

Credits: 6; Years Offered: 9

Prerequisites: Determined by High School Placement Test, department referral.

This course uses a molecular approach to the study of major biological concepts. Areas of study include atomic structure, chemical bonding, organic molecules, cellular activities, DNA structure, genetics, and evolution. A systems approach is used to study various organisms with an emphasis on human systems. The course concludes with a study of ecology. Laboratory work provides opportunities to reinforce and apply knowledge, to develop scientific procedures, and to think critically.

AP® Biology/Lab (125)

Credits: 7; Years Offered: 12

Prerequisites: "A+" in Biology, Chemistry, Physics; or "B+" in Honors Sciences; departmental recommendation.

This course is designed to be the equivalent of a first-year college course taken by biology majors. Areas of study include molecules and cells; genetics and evolution; organisms and populations. Lab work encourages the development of important skills such as detailed observation, accurate recording, experimental design, manipulation, data interpretation, and statistical analysis.

Assignments offer the opportunity for students to learn about problem solving, the scientific method, techniques of research, and the use of scientific literature. Students are required to take the AP exam.

Chemistry/Lab (140)

Credits: 6; Years Offered: 10

Prerequisites: Biology

This course is a study of the properties and changes that occur in the composition of matter. This is accomplished by studying and stressing chemical bonding, periodicity in the behavior of chemical elements, the quantum mechanical model of the atom, molecular structure, the mechanics of a chemical reaction and the concept of the mole. Math skills are employed for the quantitative study of stoichiometry problems. This course includes the study of oxidation- reduction reactions, conversion methods and gas laws.

Chemistry Honors/Lab (142)

Credits: 6; Years Offered: 10

Prerequisites: "A+" average in Biology or "B" average in Biology Honors; "A+" in Math or "B+" in Math Honors; departmental recommendation.

This course covers the study of matter, its properties and the changes that occur in its composition. Application and logical interpretation of this knowledge is also stressed. Topics covered include nomenclature, chemical formulas and equations, stoichiometry, atomic structure and quantum mechanics. Other topics include chemical bonding and molecular geometry, phases of matter, solution chemistry, equilibrium, reaction rates, thermodynamics, acid-base reactions and electrochemistry. Lab experiments serve to illustrate and reinforce these areas.

AP® Chemistry/Lab (145)

Credits: 7; Year Offered: 12

Prerequisites: "A" or better in AP Physics; "A+" in Physics Honors; "A" or better in Chemistry Honors; departmental recommendation.

Completion of summer assignments is required. This course is the equivalent of a first-year college course for science and engineering majors, with a highly theoretical, in-depth treatment of the fundamental concepts learned in the Honors Chemistry course. Topics covered include chemical reactions and equations including oxidation- reduction and precipitation reactions, stoichiometry, atomic and molecular structures with geometry, chemical bonding, periodic trends, states of matter, and solution chemistry.

Equilibrium topics include gaseous, acid-base and precipitate. Chemical kinetics, electrochemistry and quantum mechanics are covered. Lab experiments reinforce theory and technique. Students are required to take the AP exam.

Physics/Lab (160)

Credits: 6; Years Offered: 11

Prerequisites: Biology and Chemistry.

Physics is a problem-solving course with an emphasis on mathematical applications involving the properties and behavior of matter. Topics covered include mechanics, heat, waves, optics and electrical circuits. The main objective of this course is to develop critical thinking.

Physics Honors/Lab (162)

Credits: 6; Years Offered: 11

Prerequisites: Averages of "B" in Honors Chemistry; "A+" in Chemistry; "B" in Honors Math; "A+" in Math; departmental recommendation.

This is an in-depth study of the concepts in physics with great emphasis placed on mathematical and physical relationships. Problems are that of a first-year college physics course. Students intending to pursue engineering or science degrees in college are advised to take this course.

AP® Physics I /Lab (165)

Credits: 7; Years Offered: 11

Prerequisites: "A+" averages in both Honors Math and Honors Chemistry; departmental recommendation.

This course is offered as a first-year college-level Physics course for highly motivated and academically-oriented students. This is a rigorous, fast-paced course, which covers the topics of mechanics, heat and thermodynamics, waves and optics, electricity and magnetism, and modern physics. Students are required to take the AP Physics exam.

Forensic Science/Lab (180)

Credits: 5; Year Offered: 12.

Prerequisites: Biology, Chemistry, Physics; department referral. This senior year elective focuses on the scientific practices surrounding the field of forensics and crime scene investigation. The first part of the course focuses on the history and development of forensics as a science with the advent of new technologies. The basics of criminalistics, both in the lab and at the crime scene, are discussed as well as the importance and definition of physical evidence. The second part of the course moves into the anatomy of the human body and how it relates to an autopsy and forensic pathology. The vital organ systems are discussed in detail. Students act as forensic scientists with regard to specific practices such as fingerprinting, blood serology, toxicology, and ballistics. This course does not fulfill the three-year core science requirement.

Anatomy and Physiology Honors (192)

Credits: 5; Year Offered: 11, 12.

Prerequisites: "B+" or better in all college preparatory sciences; "B" or better in honors sciences, and departmental recommendation.

This elective course will include a yearlong program of studying human anatomy with the rigors of an advanced level science course. The areas covered will include medical terminology, cell and tissue structure and the 10 systems of the human body, along with one full quarter dedicated to dissection. Students will also learn how to analyze scientific information and practice the art of scientific writing, research, and presentation of data. This course does not fulfill the three-year core science requirement.

Religious Studies

Religion I (200)

Credits: 5; Year Offered: 9

Old Testament/Judaic History: Students will study important Scripture stories and passages with particular emphasis on the Pentateuch (first five books). Careful examination of major themes such as creation, covenant, and community helps students realize the relationship between Judaism and Christianity.

Community Service: A required component of this course which is equal to 10% of the course grade.

Foundations of Faith: This course encourages student understanding of the customs, practices and beliefs of the Catholic Church. Students will be presented with the fundamentals of the Catholic Faith from the Creed to the Catechism.

Community Service: A required component of this course which is equal to 10% of the course grade.

Religion I Honors: Journey through the Old Testament/New Testament (202)

Credits: 4; Year Offered: 9

Prerequisite: Determined by the High School Placement Test. This full year course provides an overview of the Hebrew Scriptures. This foundation of the sacred stories of all Hebrew Scriptures integrates the religious roots of Judaism as they unfold in Christian New Testament studies through various projects and researched topics. Community Service is a required component of this course which is equal to 10% of the course grade.

Religion II (220)

Credits: 5; Year Offered: 10

Christology: This course gives the student a clear presentation of the life, ministry, and message of Jesus. The student builds from the initial study of the historic backgrounds to a later discussion of Jesus' message, death and Resurrection. This course offers reflection on the theological understanding of the role of the Jesus of history and of the Christ of faith.

Sacraments: Students gain a greater understanding of sacramental awareness through the study of symbolism, ritual and prayer. Special emphasis is given to the Sacraments of Initiation, Baptism, Confirmation and the Eucharist. This course guides students to recognize how sacraments relate to their daily lives.

Religion II Honors: Church History (222)

Credits: 2.5; Year Offered: 10.

Prerequisites: "B" or better in both Religion I Honors & Western Civilization Honors.

This semester course presents the major developments of and the key figures of the Church. Emphasis is given to the Church as a world shaping force profoundly influenced by the message of Jesus and the action of the Church.

Religion II Honors: World Religions (232)

Credits: 2.5; Year Offered: 10.

Prerequisites: Required course for Global Honors students only.

This course examines how questions and issues of life are addressed by the major religions: Judaism, Christianity, Islam, Buddhism and Hinduism. The creed, code and culture of each religion are examined and contrasted. Students will also discuss and explore other contemporary religions. The course encourages students to develop respect and tolerance for other faiths. Course study will be enhanced through speakers, trips and research.

Religion III: Christian Morality (240)

Credits: 5; Year Offered: 11

Christian Morality: Christian morality occupies a central place in the curriculum of a Catholic high school. The emphasis in this course is on the development of an informed conscience based on Catholic teachings. The students learn the importance of human needs, faith and critical reflection as a basis for making moral decisions.

All juniors in the 240 class will study Christian morality first semester. Their area of concentration for the second semester (World Religions, Human Sexuality) will be at the discretion of the teacher.

World Religions: This course presents the five major religions: Judaism, Christianity, Islam, Buddhism and Hinduism. Students gain a greater understanding of the worship, beliefs and practices of these religions while they note the similarities and respect the differences. Multi-media projects and research are assigned.

Human Sexuality: A course based on the teachings of John Paul II's revolutionary *Theology of the Body*. Students will discover the purpose of existence and the answers to questions about life, relationships and sexuality.

Religion III Honors: Christian Morality (242)

Credits: 5; Year Offered: 11

Prerequisites: "B" or better in Religion II Honors, departmental recommendation.

This course follows the outline of Religion III with emphasis on an in-depth application of principles to contemporary moral issues. This is accomplished through personal research, group work, and formal presentations.

Religion III: Morality-Ethics (244)

Credits: 5; Year Offered: 11

Prerequisite: "B+" or better in prior Religion classes; departmental recommendation only.

This course is a study of the principles of moral and ethical decision-making as it is influenced by culture, media, business and government policies along with religious and personal morals. Students will attempt to answer the questions: What does Jesus have to do with ethics and what moral and ethical significance does he have for Christians today? How does Roman Catholicism influence our moral and ethical decision-making? Students will be required to prepare research papers both individually and in groups and present their findings in oral presentations.

Religion IV: Christian Life Choices (260)

Credits: 5; Year Offered: 12.

This course explores various Christian lifestyles focusing on the single, religious and married vocations with their respective opportunities and challenges. Additional topics include choices and commitments; work and money; communication; friendship; dating; love and human sexuality. The course encourages personal reflection and discussion through autobiographies, journals and projects.

Religion IV Honors: Christian Life Choices & Sacraments (262)

Credits: 5; Year Offered: 12

Prerequisites: "B" or better in Religion III Honors; departmental recommendation.

This course follows the same outline and description as Christian Life Choices, but includes the sacraments, with an emphasis on matrimony and the sacraments of initiation.

Religion IV: Christian Life Choices & Service Option (263)

Credits: 5; Year Offered: 12

Prerequisite: Approval of the Religion Chairperson.

This course follows a condensed Christian Life Choices curriculum covering the developmental aspects of life choices including the spiritual, emotional, psychological & cognitive preparations for those choices. Students are prepared for and encouraged to volunteer in local hospitals, shelters, nursery schools, nursing homes. They may support the STA community working on special projects. Students have the opportunity to attend out-of-school service sites or remain in school during this period. A total of twenty-five service hours per quarter is required.

Religion IV: Peer Leadership (264)

Credits: 5; Year Offered: 12

Prerequisites: 2.5 cumulative GPA - Interested juniors are required to participate in a comprehensive selection process that consists of a written application, personal interview, and observed group task. This course provides seniors with a thorough knowledge of group dynamics, basic leadership, problem solving, and communication skills. Also, this course explores various Christian lifestyles focusing on the single, religious, and married vocations with their respective opportunities and challenges. Additional topics include friendship, dating, love and human sexuality, and discerning choices and commitments in life. Students who are selected to be peer leaders are also required to sign a contract, along with their parents, agreeing to abide by the confidentiality, no use of alcohol, drugs and tobacco, and positive role model policies. Failure to follow these policies will result in dismissal from the Peer Leadership program.

Physical Education

Physical Education (300)

Credits: 2.5; Years Offered: 9, 10, 11, 12

Physical Education classes help the student achieve physical, social and mental fitness. Students have the opportunity to experience and learn the skills required of several team-building activities. These activities develop sportsmanlike values in our students. Activities like aerobics, dance and recreational games are designed to encourage students to work at their own pace to attain personal physical goals. All activities exercise both the mind and the body in order to develop the whole student. The freshman year component includes Project Adventure activities, which develop problem-solving, acceptance, leadership and communication skills.

Freshman Health (304)

Credits: 2.5; Year Offered: 9

This course begins with the study of all body systems, including the male and female reproductive system. The second half of the class will cover drug, tobacco and alcohol abuse. In addition, proper nutrition, exercise wellness and other aspects of a healthy lifestyle will be examined.

Sophomore Health: Driver Theory (324)

Credits: 1.25; Year Offered: 10

This course is designed to familiarize the student with the operation of the automobile. Special emphasis is placed on NJ laws and regulations. The state written test is given at this time. This marking period course is scheduled without regard to the student's birth date

Junior Health (344)

Credits: 1.25; Year Offered: 11

This course begins with the study of diseases and disorders including infectious diseases and their prevention. This course covers sexually transmitted diseases, HIV & AIDS. The second half of the course deals with non-infectious diseases, including cancer, heart disease, diabetes and arthritis. Students will also be instructed on the benefits of organ and tissue donation.

Mathematics

Calculator Use: The math department strongly recommends all students have a graphing calculator, TI-83 or any model of the TI-84. All classroom demonstrations are done using these calculators. Any student using any other TI model or a model from another manufacturer should be proficient with its use or be prepared to seek outside resources for help.

Summer Work: As part of the first quarter grade, students enrolled in the following courses will have an on-line summer math assignment: Algebra I, Algebra I Accelerated, Algebra I Honors, Geometry, Geometry Accelerated, Geometry Honors, Algebra II, Algebra II Honors and Algebra II/Geometry Honors. Assignments are course specific. Changes to a student's fall course could change the required summer assignment.

Algebra I (400)

Credits: 5; Year Offered: 9

Prerequisites: Departmental recommendation based on high school placement test, a math placement test and the grammar school transcript.

This course is designed to develop the standard axioms of Algebra I while enhancing a student's basic skills in math. The beginning focus is on reinforcing pre-algebra skills of signed numbers, number sense and order of operations. The pace of the course allows extra time for students who need additional time to master a concept. Integral exponents, linear equations and operations with polynomials are emphasized. Word problems are identified for use in science and advanced math courses. Every student should have a scientific calculator; however, a graphing calculator is recommended. (TI-83 or any model of the TI-84).

Algebra I Accelerated (401)

Credits: 5; Year Offered: 9

Prerequisites: Departmental recommendation based on the high school placement test, a math placement test and the grammar school transcript.

This course assumes proficiency in the Pre-algebra skills of signed numbers, number sense and order of operations. Integral exponents, operations with polynomials and linear and quadratic equations are emphasized. Systems of two linear equations are introduced. Various types of word problems are identified for use in science and advanced math courses. Every student should have a scientific calculator; however, a graphing calculator is recommended. (TI-83 or any model of the TI-84).

Algebra I Honors (402)

Credits: 5; Year Offered: 9

Prerequisites: Departmental recommendation based on high school placement test, math placement test, and grammar school transcript.

This course is designed to develop the standard axioms of algebra. Operation with signed numbers, integral exponents, both positive and negative as well as scientific notation are emphasized. Solving equations, inequalities and simplifying algebraic expressions are mastered. Elementary geometry formulas are applied to composite figures. Ratio, proportion problems, scientific notation and unit conversions help prepare students for science applications. Students will develop critical thinking skills through numerous and varied word problems using one and two variable equations and inequalities. Every student must have a graphing calculator (TI-83 or any model of the TI-84).

Geometry (410)

Credits: 5; Years Offered: 10

Prerequisites: Departmental recommendation based on completion of an Algebra I course and a math placement test.

This course introduces and develops fundamental Geometry concepts and their applications. There is emphasis on integrating Algebra I skills into the Geometry topics. Lines and planes, triangles, circles, polygons, similarity, congruence and basic trigonometry are studied at a pace that allows for students who need extra reinforcement to master concepts. Every student should have a scientific calculator; however, a graphing calculator is recommended (TI-83 or any model of the TI-84).

Geometry Accelerated (411)

Credits: 5; Years Offered: 9, 10

Prerequisites: Completion of an Algebra I course and departmental recommendation based on Math placement test.

This course introduces and develops multiple geometry concepts and uses a problem-solving base which integrates Algebra skills. Students will study circles, triangles, polygons, lines and planes, similarity, congruence and basic trigonometry. Every student should have a scientific calculator; however, a graphing calculator is recommended. (TI-83 or any model of the TI-84).

Geometry Honors (412)

Credits: 5; Years Offered: 9, 10

Prerequisites: Completion of Algebra I Honors with a "B+" or better average and/or departmental recommendation based on Math placement test.

Lines, triangles, polygons, similarity, congruence, right triangles and basic trigonometry, circles and surface area and volume are studied. Critical thinking skills are emphasized throughout the course. Every student must have a graphing calculator. (TI-83 or any model of the TI-84)

Algebra II/Geometry Honors (422)

Credits: 5; Years Offered: 9, 10.

Prerequisites: "B+" or better in Algebra I Honors or departmental recommendation.

This is a rigorous, fast-paced course which covers a complete Geometry course and a complete Algebra II course in one year. In Semester I, students will study lines, triangles, polygons, similarity, congruence, right triangles, basic trigonometry rules, circles, surface area and volume. In Semester II, students will study the roots of an equation, rational exponents and functions, radicals and radical functions, various types of equations, variations, matrices, complex numbers, quadratic and trigonometric functions and conic sections. Critical thinking skills are emphasized throughout the course. Every student must have a graphing calculator (TI-83 or any model of the TI-84).

Algebra II (430)

Credits: 5; Year Offered: 10, 11

Prerequisites: Completion of Algebra I course and a Geometry course and/or departmental recommendation based on math placement test.

This course covers fundamental operations on real numbers, complex numbers and polynomial expressions. Solving quadratic equations, solving and graphing equations and inequalities in one, two and three variables, variation and matrices are studied at a pace that allows for students who need extra reinforcement to master concepts. Every student must have a graphing calculator (TI-83 or any model of the TI-84).

Algebra II Accelerated (431)

Credits: 5; Years Offered: 9, 10, 11

Prerequisites: Completion of an Algebra I course and a Geometry course and/or departmental recommendation based on a math placement test.

This course covers the fundamental operations on real numbers, complex numbers and polynomial expressions. Students are able to solve quadratic equations and resolve the relationship between roots, factors and coefficients of third- and fourth-degree equations. Other topics include equations and inequalities in one, two or three variables, variation and matrices. Emphasis is placed on problem solving. Every student must have a graphing calculator (TI-83 or any model of the TI-84).

Algebra II Honors (432)

Credits: 5; Years Offered: 9, 10, 11

Prerequisites: Completion of Geometry Honors with a “B+” or better average and/or departmental recommendation based on a math placement test.

Roots, rational exponents and functions, radicals and radical functions, various types of equations, variation, matrices, complex numbers, quadratic and polynomial functions, trigonometric functions and conic sections are studied. Critical thinking skills are emphasized throughout the course. Every student must have a graphing calculator. (TI-83 or any model of the TI-84).

Advanced Algebra and Trigonometry (461)

Credits: 5; Years Offered: 12

Prerequisites: Completion of an Algebra II course and/or departmental recommendation.

This course emphasizes the development of the algebra and trigonometry skills necessary for college courses. Essential topics are the polynomial, exponential, logarithmic and trigonometric functions and their characteristics. Trigonometry topics include identities, right angle applications and the Laws of Sines and Cosines. Every student must have a graphing calculator (TI-83 or any model of the TI-84).

Pre-Calculus Accelerated (450)

Credits: 5; Year Offered: 11, 12.

Prerequisites: Completion of an Algebra II Accelerated course and/or departmental recommendation.

Students acquire and master the fundamental skills of Algebra and Trigonometry. Polynomial, rational, exponential, logarithmic and trigonometric functions are studied. Trigonometry topics include identities, right triangle applications and the Laws of Sines and Cosines. Every student must have a graphing calculator (TI-83 or any model of the TI-84).

Pre-Calculus Honors (452)

Credits: 5; Years Offered: 10, 11

Prerequisites: Completion of Algebra II/Geometry Honors with a “B+” or better average or Algebra II Honors with a “B+” or better average and/or departmental recommendation.

This course includes pre-calculus topics such as polynomial, rational, trigonometric, exponential and logarithmic functions and their graphs. Sequences, series, parametrics, vectors and polars are presented. The study of limits is introduced. Every student must have a graphing calculator (TI-83 or any model of the TI-84).

Calculus I (463)

Credits: 5; Years Offered: 11, 12

Prerequisites: Completion of a Pre-Calculus course and/or departmental recommendation.

Differential and integral Calculus topics are introduced and their applications, including related rate problems, area under a curve and minimizing and maximizing problems, are presented. Every student must have a graphing calculator (TI-83 or any model of the TI-84). Classroom instruction will be done on a Texas Instruments calculator.

AP® Calculus AB (465)

Credits: 5; Years Offered: 11, 12

Prerequisites: Pre-Calculus Honors and departmental recommendation.

AP Calculus AB is intended for students who have a thorough knowledge of college preparatory mathematics, including Algebra and Pre-Calculus. The course introduces the student to the methods and procedures of differential and integral calculus. Every student must have a graphing calculator (TI-83 or any model of the TI-84). Classroom demonstrations are done on a Texas Instruments graphing calculator. Students are required to take the AP exam.

AP® Calculus BC (475)

Credits: 5; Year Offered: 11, 12.

Prerequisites: Completion of a Pre-Calculus Honors course and/or departmental recommendation.

This course is a rigorous full year course in Single Variable Calculus that introduces the methods and procedures of differential and integral Calculus plus the additional topics of parametric, polar and vector functions and series. Every student must have a graphing calculator (TI-83 or any model of the TI-84). Classroom demonstrations are done on a Texas Instruments graphic calculator. Students are required to take the AP exam.

Statistics (484)

Credits: 5; Year Offered: 12

Prerequisites: Completion of a Calculus I course and/or departmental recommendation.

This course gives a basic introduction to the study of Statistics. Topics covered include organizing data, variation, probability, normal distribution and hypothesis testing. Every student must have a graphing calculator (TI-83 or any model of the TI-84).

AP® Statistics (485)

Credits: 5; Year Offered: 12

Prerequisites: Calculus AB or Calculus BC or departmental recommendation.

AP Statistics is a rigorous full year course that introduces to the student the concepts and tools of data description and organization, probability, normal distributions, variance and standard deviation, hypothesis testing, correlation, regression and inference. Every student must have a graphing calculator (TI-83 or any model of the TI-84). Students are required to take the AP exam.

Sports Management and Statistics (474)

Credits: 5; Year Offered: 12

Prerequisites: “B” or better in previous math classes; strong computer skills.

Students will gain a greater knowledge of mathematics in this elective course by connecting it to the real-world application in the sports world. Student work will be evaluated through tests, projects and writing assignments.

Principles of Engineering (470)

Credits 5; Years Offered: 11, 12

Students develop skills in problem solving, research and design while learning strategies for design process documentation, collaboration and presentation. Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation.

Social Studies

World History (500)

Credits: 5; Years Offered: 9, 10

The World History course explores past civilizations and their impact upon the present. The course surveys Eastern and Western Civilizations and the development of major world religions. The Medieval Period and the dominant role of the Catholic Church are examined. Emphasis is on the transition from Medieval to Modern Europe with special attention on the growth of democracy and nationalism. Knowledge of world geography and the study of other cultures are stressed.

World History Honors (502)

Credits: 5; Years Offered: 9, 10

Prerequisite: Determined by the High School Placement Test.

World History Honors surveys major historical themes and cultural patterns of Eastern and Western civilizations. Political, economic and sociocultural aspects of all major world cultures are emphasized in their geographical relationships. Activities develop analytical and critical thinking through readings and research.

Western Civilization Honors (512)

Credits: 5; Year Offered: 9

Prerequisite: This course is limited to students enrolled in the Honors Program determined by the High School Entrance Test. This course is a study of the historical and cultural evolution of Western society from its beginning to the Industrial Revolution. Institutions and ideas are examined not only as social phenomena, but also as expressions of the human encounter with the world. Students are acquainted with basic historical concepts and culture as introduction to Western civilization.

U.S. History I (530)

Credits: 5; Years Offered: 10, 11.

U.S. History I is a study of the development of America from the colonial era to the end of Reconstruction. Trends in American history including geography, immigration, westward expansion, technological change, religious expansion, the development of political parties and civil rights are studied.

U.S. History I Honors (532)

Credits: 5; Year Offered: 11

Prerequisites: “B+” or better in Western Civilization II. “B+” or better in World History Honors, or “A” in World History and departmental recommendation.

This is a study of the growth of America from the Age of Discovery to the Gilded Age. Emphasis is on the relationship of political, economic and social aspects of America’s development. Special emphasis is paid to trends, including the growth of democracy, political parties, nationalism, industrialization and imperialism. Constitutional studies, primary documents and geography are included. Analytical and critical thinking are applied through essays and other projects.

U.S. History II (540)

Credits: 5; Years Offered: 11, 12

Prerequisite: U.S. History I.

This course traces the development of the United States from the Age of Imperialism to the present. Emphasis is on the events of the previous century as a guide to the nation in the 21st century. It is a chronological study of events including social, political, geographic, military and economic concepts. Critical reading, writing and thinking skills are developed through the study of primary and secondary sources.

U.S. History II Honors (542)

Credits: 5; Years Offered: 12

Prerequisites: “B+” or better in U.S. History I Honors or “A” in U.S. History I and/or departmental recommendation.

This course focuses on the U.S. from the Age of Imperialism to the present. A chronological study of American History and examination of the political, social, economic, cultural and geographic development of the U.S. is the basis for the course. Students are expected to be able to use their analytical, written and oral skills. Students will be instructed in the process of writing effective essays and the interpretation of primary and secondary sources. Students may optionally take the AP exam.

AP® U.S. History II (545)

Credits: 5; Year Offered: 12

Prerequisites: “A” average in U.S. History I Honors and/or departmental recommendation.

This course is taught at the college level with a college level textbook. The course surveys American History from the Age of Imperialism to the present. Areas of study include the political, social, economic, psychological, cultural and geographic development of the U.S. Assessments include essays, research papers and interpretation of primary and secondary source materials. Extensive reading is required; writing, verbal and analytical skills are necessary to succeed. Students are required to take the AP exam.

Psychology (560)

Credits: 5; Year Offered: 12

Prerequisites: “C+” or better GPA.

Psychology is designed to cover material comparable to an introductory college level course. This course is open to those students who have interest in this social science. The course includes a basic survey of all fields of psychology with particular emphasis on personality as well as abnormal, developmental and social psychology.

Economics Honors (Online) (572)

Credits: 5; Year Offered: 12

Prerequisites: “B+” or higher in previous History courses or teacher recommendation.

Economics is the study of how individuals, businesses and governments make decisions about the use of scarce resources. This class will teach students how to think like economists. Students will learn how to apply key microeconomic concepts such as supply and demand, prices and opportunity cost. They will also be introduced to macroeconomic principles such as banking, inflation, unemployment and the Federal Reserve System. The course will also cover a history of economic ideas from the 1700s to modern time.

World Language

Spanish I (S600)

Credits: 5; Years Offered: 9

Spanish I is a foundation course for students with no prior Spanish experience needed. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Novice-Mid. By the end of the academic year, students should be able to engage in conversation on familiar topics in the present tense and understand Hispanic customs and their infusion into American society.

Spanish I Honors (S602)

Credits: 5; Years Offered: 9

Prerequisites: Determined by the High School Placement Test and grammar school transcript.

Spanish I Honors is a foundation course for students with no prior Spanish experience needed. Students are required to use the target language and language skills are enhanced through class discussions, compositions and novels. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Novice-High. By the end of the academic year, students should be able to engage in conversation on familiar topics in the present and past tenses and understand Hispanic customs and their infusion into American society.

Spanish II (S610)

Credits: 5; Years Offered: 9, 10

Prerequisites: Successful completion of Spanish I or placement test.

Spanish II is a continuation and expansion of the fundamentals of Spanish. Students are required to use the target language and language skills are enhanced through class discussions, compositions and readings. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Novice-High. By the end of the academic year, students should be able to engage in conversation in the several tenses, describe past events, predict future events, and make comparisons between American and Hispanic cultures.

Spanish II Honors (S612)

Credits: 5; Years Offered: 9, 10

Prerequisites: Teacher recommendation; “B” or better in Spanish I Honors or placement test.

Spanish II Honors is a continuation and expansion of the fundamentals of Spanish. Students are required to use the target language and language skills are enhanced through class discussions, compositions and novels. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Intermediate-Low. By the end of the academic year, students should be able to engage in conversation on familiar topics and understand Hispanic culture.

Spanish III (S620)

Credits: 5; Years Offered: 10, 11

Prerequisites: Teacher recommendation; “C+” or better in Spanish II. Spanish III builds upon the fundamentals of Spanish with advanced vocabulary and structures.

Students are required to use the target language and language skills are enhanced through class discussions, compositions and readings. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL) is Intermediate-Low. By the end of the academic year, students should be able to engage in conversation in several tenses, discuss and defend opinions, and make comparisons between American and Hispanic cultures.

Spanish III Honors (S622)

Credits: 5; Years Offered: 10, 11

Prerequisites: Teacher recommendation; “B” or better in Spanish II Honors.

Spanish III Honors builds upon the fundamentals of Spanish with advanced vocabulary and structures. Students are required to use the target language and language skills are enhanced through class discussions, compositions and independent readings. Additional cultural readings on Spain and the Hispanic world are presented. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Intermediate-Mid. By the end of the academic year, students should be able to engage in conversation in several tenses, discuss and defend opinions, and make comparisons between American and Hispanic cultures.

Spanish IV (S630)

Credits: 5; Years Offered: 11, 12

Prerequisites: Teacher recommendation; “C+” or better in Spanish III or Spanish for Heritage Speakers II.

Spanish IV integrates the extensive language experience gained in levels 1 through 3. Students are required to use the target language and language skills are enhanced through oral presentations, class discussions, compositions and selected short stories. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Intermediate-Mid. By the end of the academic year, students should be able to lead conversation in several tenses, discuss and defend opinions, and explain the diversity of Hispanic cultures.

Spanish IV Honors (S632)

Credits: 5; Years Offered: 11, 12.

Prerequisites: Teacher recommendation; “B” or better in Spanish III Honors or “B+” or better in Spanish for Heritage Speakers II.

Spanish IV Honors integrates the extensive language experience gained in levels 1 through 3. Students are required to use the target language and language skills are enhanced through oral presentations, class discussions, compositions and selected works of literature and film. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Advanced-High. By the end of the academic year, students should be able to lead conversation in several tenses, discuss and defend opinions, and explain the diversity of Hispanic cultures.

Spanish V Honors: Seminar in Modern Hispanic Topics (S635)

Credits: 5; Years Offered: 12.

Prerequisites: Teacher recommendation; “B” or better in Spanish IV Honors; “B+” or better in Spanish IV.

Spanish V is a seminar-style course in modern Hispanic topics. Students are required to use the target language and language skills are enhanced through oral presentations, class discussions, literary and film analysis, and assigned compositions based on contemporary issues in Latin America and Spain. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Advanced-Mid.

Spanish for Heritage Speakers I (S640)

Credits: 5; Years Offered: 9

Prerequisite: Oral interview

This class is designed for heritage learners who are proficient speakers of Spanish. The objectives of the course are to expand communication skills and cultural knowledge, including the study of students’ own cultural heritage. Students will learn to use Spanish beyond familiar contexts by reading relevant literary selections and will develop writing skills for academic purposes. Spanish for Heritage Speakers is a two-year sequence, which is followed by Spanish IV or Spanish IV Honors.

Spanish for Heritage Speakers II (S650)

Credits: 5; Years Offered: 10

Prerequisite: Successful completion of Spanish for Heritage Speakers I

This class continues on the foundations of Spanish for Heritage Speakers I. The objectives of the course are to expand communication skills and cultural knowledge, including the study of students’ own cultural heritage. Students will perfect their verbal communication skills while continuing to build reading and writing skills for academic purposes. Spanish for Heritage Speakers II is followed by Spanish IV or Spanish IV Honors.

Italian I (I600)

Credits: 5; Years Offered: 9

Italian I is a foundation course with no prior Italian experience needed. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Novice-Mid. By the end of the academic year, students should be able to engage in conversation on familiar topics and understand Italian culture.

Italian I Honors (I602)

Credits: 5; Years Offered: 9

Prerequisite: Determined by the High School Placement Test and grammar school transcript.

Italian I Honors is a foundation course for students with no prior Italian experience needed. Students are required to use the target language and language skills are enhanced through class discussions, compositions and novels. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Novice-High. By the end of the academic year, students should be able to engage in conversation on familiar topics and understand Italian culture.

Italian II (I610)

Credits: 5; Years Offered: 9, 10

Prerequisite: Successful completion of Italian I or placement test.

Italian II is a continuation and expansion of the fundamentals of Italian. Students are required to use the target language and language skills are enhanced through class discussions, compositions and readings. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Novice-High. By the end of the academic year, students should be able to engage in conversation in the several tenses, describe past events, predict future events and make comparisons between American and Italian cultures.

Italian II Honors (I612)

Credits: 5; Years Offered: 9, 10.

Prerequisite: Teacher recommendation; “B” or better in Italian I Honors or placement test.

Italian II Honors is a continuation and expansion of the fundamentals of Italian. Students are required to use the target language and language skills are enhanced through class discussions, compositions and novels. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Intermediate-Low. By the end of the academic year, students should be able to engage in conversation on familiar topics and understand Italian culture.

Italian III (I620)

Credits: 5; Years Offered: 10, 11

Prerequisites: Teacher recommendation; “C+” or better in Italian II.

Italian III builds upon the fundamentals of Italian with advanced vocabulary and structures. Students are required to use the target language and language skills are enhanced through class discussions, compositions and readings. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Intermediate-Low. By the end of the academic year, students should be able to engage in conversation in several tenses, discuss and defend topics, and make comparisons between American and Italian cultures.

Italian III Honors (I622)

Credits: 5; Years Offered: 10, 11

Prerequisites: Teacher recommendation; “B” or better in Italian II Honors.

Italian III Honors builds upon the fundamentals of Italian with advanced vocabulary and structures. Students are required to use the target language and language skills are enhanced through class discussions, compositions and independent readings. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages, is Intermediate-Mid. By the end of the academic year, students should be able to engage in conversation in several tenses, discuss and defend opinions, and make comparisons between American and Italian cultures.

Italian IV: Seminar in Modern Italian Topics (I630)

Credits: 5; Years Offered: 11, 12

Prerequisites: Teacher recommendation; “C+” or better in Italian III.

Italian IV is a seminar-style course in modern Italian topics. Students are required to use the target language and language skills are enhanced through oral presentations, class discussions, literary and film analysis and assigned compositions based on contemporary issues in Italy. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Intermediate- High.

Italian IV Honors: Seminar in Modern Italian Topics (I632)

Credits: 5; Years Offered: 11, 12

Prerequisites: Teacher recommendation; “B” or better in Italian III Honors.

Italian IV Honors is a seminar-style course in modern Italian topics. Students are required to use the target language and language skills are enhanced through oral presentations, class discussions, literary and film analysis and assigned compositions based on contemporary issues in Italy. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Advanced-Low.

French 1 (F600)

Credits: 5; Years Offered: 9

French I is a foundation course for students and no prior French experience is needed. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Novice-Mid. By the end of the academic year, students should be able to engage in conversation on familiar topics and understand French culture.

French 1 Honors (F602)

Credits: 5; Years Offered: 9.

Prerequisites: Determined by the High School Placement Test and grammar school transcript.

French 1 Honors is a foundation course for students and no prior French experience is needed. Students are required to use the target language and language skills are enhanced through class discussions, compositions and novels. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Novice-High. By the end of the academic year, students should be able to engage in conversation on familiar topics and understand French culture.

French II (F610)

Credits: 5; Years offered: 9, 10

Prerequisites: Successful completion of French I or placement test. French II is a continuation and expansion of the fundamentals of French. Students are required to use the target language and language skills are enhanced through class discussions, compositions and readings. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Novice-High. By the end of the academic year, the student should be able to engage in conversation in the several tenses, describe past events, predict future events, and make comparisons between American and French cultures.

French II Honors (F612)

Credits: 5; Years offered: 9, 10

Prerequisite: Teacher recommendation; “B” or better in French I Honors or placement test.

French II Honors is a continuation and expansion of the fundamentals of French. Students are required to use the target language and language skills are enhanced through class discussions, compositions and novels. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Intermediate-Low. By the end of the academic year, students should be able to engage in conversation on familiar topics and understand French culture.

French III (F620)

Credits: 5; Years Offered: 10, 11

Prerequisites: Teacher recommendation; “C+” or better in Italian II. French III builds upon the fundamentals of French with advanced vocabulary and structures. Students are required to use the target language and language skills are enhanced through class discussions, compositions and readings. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages (ACTFL), is Intermediate-Low. By the end of the academic year, students should be able to engage in conversation in several tenses, discuss and defend topics, and make comparisons between American and French cultures.

French III Honors (F622)

Credits: 5; Years Offered: 10, 11

Prerequisites: Teacher recommendation; “B” or better in Italian II Honors.

French III Honors builds upon the fundamentals of French with advanced vocabulary and structures. Students are required to use the target language and language skills are enhanced through class discussions, compositions and independent readings. The target proficiency level, as identified by the American Council on the Teaching of Foreign Languages, is Intermediate-Mid. By the end of the academic year, students should be able to engage in conversation in several tenses, discuss and defend opinions, and make comparisons between American and French cultures.

Latin I Honors (L602)

Credits: 5; Year Offered: 9

Prerequisite: Determined by the High School Placement Test. The study of Latin provides a foundation in vocabulary and grammar for the study of modern Romance languages and aids in strengthening the student's knowledge of English. Latin also supports the development of analytical thinking and is helpful in liberal arts, as well as the medical and legal fields. Latin I emphasizes the basics of grammar, the study of vocabulary and the rules needed for correct translation. Roman culture is interspersed throughout the course.

Latin II Honors (L612)

Credits: 5; Years Offered: 10

Prerequisites: Teacher recommendation; "B" or better in Latin I Honors.

Latin II Honors begins with a review of Latin I concepts. Students then develop their vocabulary and complete the study of basic grammar. Roman culture is integrated into the course.

Latin III Honors (L622)

Credits: 5; Years Offered: 11

Prerequisites: Teacher recommendation; "B" or better in Latin II Honors.

The goal of Latin III is to utilize the grammatical concepts developed during the previous two years to actively read Latin texts, both historical and literary. New points of grammar are noted in passing, but the emphasis is on reading fluency. After a selection of varied texts, the students spend one quarter each on Caesar and Vergil.

Latin IV Honors (L632)

Credits: 5; Years Offered: 12

Prerequisites: Teacher recommendation; "B" or better in Latin III Honors.

Latin IV covers various texts by classical Latin authors such as Horace, Ovid, Catullus, Cicero, Livy and Plautus. Poetic forms, grammatical structures, figures of speech and metrics are introduced as needed before studying selected readings from Vergil, Ovid and Catullus. Additional units may be added covering Medieval and Renaissance texts to explore Latin beyond the classical period and introductory linguistics, to understand the theoretical foundations of language.

English

English I (700)

Credits: 5; Year Offered: 9

Prerequisite: Determined by the High School Placement Test. This first-year class focuses on the basic skills: reading, writing, speaking and listening. Emphasis is placed on the sentence, with its various patterns, and on the paragraph, with its various developments. An introduction to the genres of literature is also offered. Fifteen units of vocabulary are covered.

English I Honors (702)

Credits: 5; Year Offered: 9

Prerequisite: Determined by the High School Placement Test. This Honors course is a challenging program of advanced English I skills. Emphasis falls on clear and effective paragraph development. The basic essay form will also be taught. Readings are selected from the genres of poetry, nonfiction, fiction, drama and the novel. Fifteen units of vocabulary are covered.

English II (720)

Credits: 5; Year Offered: 10

The sophomore level course focuses on the study of basic skills. Emphasis is on clear and effective paragraph development and on clear and effective essay writing. Reading selections are chosen mainly from traditional American Literature. Thirty units of vocabulary are covered.

English II Honors (722)

Credits: 5; Year Offered: 10

Prerequisites: "B" or better in English I Honors; teacher recommendation.

The Sophomore Honors course offers an intensified study of basic skills. Emphasis is on clear and effective paragraph and essay development, and on the beginnings of the research paper. Reading selections are chosen mainly from traditional American literature. Thirty units of vocabulary are covered.

English III (730)

Credits: 5; Year Offered: 11

The Junior English program further develops basic skills. Emphasis is focused on the analytical essay. Fundamental research skills are covered, as well as verbal and writing SAT preparation. Reading selections come from the greatest British masterpieces. Thirty units of vocabulary are covered.

English III Honors (732)

Credits: 5; Year Offered: 11

Prerequisites: "B" or better in English II Honors; teacher recommendation.

The Junior English program further develops basic skills. Emphasis is focused on the analytical essay. Reading selections are from the British masterpieces. Thirty units of vocabulary are covered, as well as verbal and writing SAT preparation.

English III: Shakespeare Option (741)

Credits: 5; Year Offered: 11

This Junior English program further develops basic skills. Emphasis is focused on the analytical essay. Fundamental research skills are covered, as well as verbal/writing SAT preparation. Reading selections come from the greatest British masterpieces, using Shakespeare's writings as the centerpiece. Thirty units of vocabulary are covered.

English IV World Literature (740)

Credits: 5; Year Offered: 12

The Senior English program continues to work on the basic skills. Emphasis is placed on the analytical essay and on a literature-based research paper. Reading selections come from the various world masterpieces.

World Literature Honors (742)

Credits: 5; Year Offered: 12

Prerequisites: "B" or better in English III Honors and/or teacher recommendation.

The course focuses on clear, effective analytical essays and on the research paper. Readings are selected from classics of world literature and world philosophies. College credit is offered for this course through Seton Hall University's Project Acceleration; see chairperson for details and permission. A literature-based research paper is required.

AP® English (745)

Credits: 5; Year Offered: 12

Prerequisite: Only by recommendation of the department chairperson.

This course focuses on clear, effective analytical essays and on the research paper. Readings are selected from the classics of world literature. College credit is offered for this class. Weekly papers are assigned; a literature-based research paper is required. Students are also required to take the AP exam.

U.S. Law Honors (752)

Credits: 5; Years Offered: 11, 12

Prerequisite: "B" or better in previous History Honors and English Honors courses or teacher recommendation.

U.S. Law will focus on the structure and history of modern U.S. court proceedings, as well as several works of literature involving court cases. Part of class time will be focused on a project-based learning assignment that culminates in a statewide mock trial competition.

Computer Skills

Computer Education (850)

Credits: 4; Year Offered: 9.

Students are introduced to computers through the exploration of Microsoft Office and Adobe Creative Cloud applications. The focus of the first quarter will be improving typing skills. Next, students will receive instructions on Internet safety. During the second and third quarters, students will develop skills in word processing, spreadsheets, presentations and publications using Word, Excel, PowerPoint, Publisher and Google Apps. In the fourth quarter, students will learn image editing skills using Photoshop. The course is project-based.

Computer Applications (852)

Credits: 1.25 Year offered: 9 Honors.

In this quarter-year course, students improve their typing and learn about Internet safety, Digital Citizenship, Microsoft Office and an introduction to Adobe Photoshop. The course is project-based.

Introduction to Coding (854)

Credits: 5; Years Offered: 11, 12

Prerequisites: "B" or better average in previous math classes.

This course teaches the foundation of computer science and basic programming using Python. There is an emphasis on helping students develop logical thinking and problem-solving skills.

Web Design (856)

Credits: 5; Years Offered: 11, 12

Prerequisites: Overall grade of "B" or better

This is a project-based course that teaches students how to build their own web pages. Students will learn the languages HTML and CSS and will create their own home pages to serve as portfolios of their creations. By the end of the course, students will be able to explain how web pages are developed and viewed on the Internet, analyze and fix errors in existing websites, and create their own multi-page websites. Students will learn the foundations of user interface design, rapid prototyping and user testing, and will work together to create professional mobile response websites.

Career Education

Career Education Program (870/880)

Credits: 1.25; Years Offered: 10, 11

The Counseling Department extends its services through a supportive and structured classroom program to assist students to become an informed career decision maker and planner. Activities are conducted in and out of school such as interest and aptitude testing; computer search techniques for work, colleges and financial aid; SAT practice exercises; one-day work shadowing; career days with outside resource speakers; mock interviews; college presentations by representatives; college fairs; resume writing and completion of a personal profile through the online Naviance program. Further career exploration is possible through career clubs.

Senior Career Seminar (890)

Credits: 1; Year Offered: 12

Prerequisites: 3.0 minimum GPA with a clear and definite post-high school career goal.

The seminar will provide direct one-on-one student mentoring, which includes professional interviews, resume writing and expansive research skills, designed to help the student find a part-time internship/career placement. This experiential exposure will be supplemented by small group discussions and seminars concerning topics related to college and the professional field of work. To ensure student success, there will be regular monthly monitoring through on-site visits and written performance evaluations completed by the internship/career mentor or supervisor. Students will be given academic credit based on consistent high-performance evaluations and completion of the mentorship program.

Fine & Performing Arts

Music I: History and Introductory Theory (900)

Credits: 5; Years Offered: 10, 11, 12

The art of music teaches timing, discipline and encourages the advancement of the group over the accomplishments of the individual. The class covers not only music as a creative art form, and the basic performance of it as such, but also the appreciation, theory and history behind all forms of music. Discussion topics will also cover music in films and TV, and the performance, application and development of basic music skills.

Music II: Technology and Composition (901)

Credits: 5; Years Offered: 10, 11, 12.

Prerequisites: Music I and participation in music department co-curriculars or departmental recommendation.

This class builds on the foundation set in Music I, adding composition and sound design into the mix. Students of any and all musical backgrounds and interests will learn the basics of composition and the techniques of great composers and arrangers, both classic and modern. Attention is especially given to portfolio/album development, with lessons in music publication, copyright law and artist/self-management.

Music III: Advanced Application and Portfolio Review (903)

Credits: 5; Years Offered: 12.

Prerequisites: Participation in Concert Band and Concert Chorus, membership in Tri-M Music Honor Society, Music II, departmental recommendation; student must be planning to major or minor in music in college.

This class is an intense study in the advanced practice of music in the modern world. Students planning on pursuing music as an art form and a career will learn about today's music industry. Additional topics include abstract music, music therapy and the study of modern liturgical music. Attention is especially given to portfolio/album development, with lessons in music publication, copyright law and artist/self-management. Students will be expected to produce college-audition quality performances in voice and multiple instruments.

Art I (910)

Credits: 5; Years Offered: 10, 11, 12.

Art I is designed to provide a foundation for students who wish to take art for personal enrichment as well as for those who intend to study fine art and build a portfolio. This comprehensive course is predominantly studio (production) oriented but also integrates aesthetics, art history and careers in the arts as they relate to various projects. The elements of art as well as the principles of design are explored. Students are encouraged to develop creative self-expression as they learn techniques in drawing, painting, printmaking and design. Materials purchase required.

Art II (911)

Credits: 5; Years Offered: 11, 12.

Prerequisites: Art I, departmental recommendation.

Art II is designed for goal-oriented students who intend to further study art and are building a portfolio as well as for those who wish to take the class for personal enrichment and lifelong learning. This course Requires students to have background experience with drawing and painting techniques and media. Students will practice developing ideas and imagery in order to create original works of art based on highly evolved concepts in the expression of personal meaning. students will explore intermediate and advanced processes and conventions for the creation of artwork. The course primarily supports the development of drawing and painting skills, but students will also have the opportunity to explore printmaking, textiles, and 3D methods.

Introduction to Engineering Design (930)

Credits: 5; Years Offered: 11, 12

Prerequisites: "B" or better in all math and computer classes or teacher recommendation.

In this course, students are introduced to the engineering profession and a common approach to the solution of engineering problems. Students will progress from completing structured activities to solving open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Through both individual and collaborative team activities, projects, and problems, students will solve problems as they practice common engineering design and development protocols such as project management and peer review. Students will develop skill in technical representation and documentation of design solutions according to accepted technical standards, and they will use current 3D design and modeling software to represent and communicate solutions.

AP[®] Art History (955)

Credits: 5; Year Offered: 10, 11, 12

Prerequisites: "B" or better averages in both Social Studies and English classes in addition to departmental recommendation.

This course explores such topics as the nature of art, its uses, its meanings, art making and responses to art. Through investigation of diverse artistic traditions of cultures from prehistory to the present, the course fosters in-depth and holistic understanding of the history of art from a global perspective. Students will analyze examples of all media; sculpture, architecture, painting, photography and graphic art; and consider their cultural and social significance. Students will be expected to complete comparative essays and research papers; independent visits to local museums may also be assigned. Middlesex County College credit may be earned for an additional fee; see chairperson for details. Students are required to take the AP exam.

Drama I (960)

Credits: 5; Years Offered: 10, 11, 12

This course is an introduction to all the elements of theater with a special emphasis on performance and self-expression. The student will gain self-confidence and self-awareness through the work in this course, which will include studying and practicing acting exercises. Dramatic scenes are rehearsed and presented in class, and a brief history of theater is taught. Students will also study the various elements of play production.

Drama II (963)

Credits: 5; Years Offered: 10, 11, 12

Prerequisite: Instructor approval.

This course is a creative exploration of theater, which encompasses and expands upon the curriculum of the Drama I class. Acting techniques previously developed are explored in depth. The preparation of the "rehearsed" scene as introduced in Drama I is further studied and practiced. Students prepare extended scenes within the class and continue to develop their knowledge of the various elements of play production. This course is recommended for students with previous theatrical experiences.

Drama III (964)

Credits: 5; Years Offered: 11, 12

Prerequisite: Instructor approval or Drama 1 or 2.

This course is a Level 3 creative exploration of theater, which encompasses and expands upon the curriculum of both Drama I and II. Acting techniques are developed further and creativity is strengthened by way of in-class scenes, monologues and one-act plays. Students will hone skills previously developed in diverse areas of play production.

Theater Arts Intensive/Lab I/II (966)

Credits: 6; Years Offered: 10, 11, 12

Prerequisite: Instructor approval.

Students will study and experience theater art, specifically in the areas of acting, musical theater, dancing, stage combat, playwriting and play production. In each of these areas, performance techniques will be emphasized. A theater lab will be held once a week to offer students additional time to work on class projects and hone their skills.

Writing for Publication (Satoma) (970)

Credits: 5; Years Offered: 11,12

Prerequisites: "B" or better average in all English courses and instructor approval; limited to 12 students.

This course is designed as a workshop for students to develop and apply skills in all areas of journalism: writing, editing, design, photography and computer graphics. A "hands-on" course, it involves direct participation in school newsmagazine as well as outside publications. Students work under strict deadlines and are required to attend journalism and press conferences. Students are obligated to attend after-school meetings.

Journal Graphics (Yearbook) (980)

Credits: 5; Years Offered: 10, 11, 12

Prerequisites: "B" or better average in Computer Science and all English courses. Course instructor has final approval of applicants. This course is designed as a workshop to develop and apply knowledge of publication skills and management. In this "hands-on" course, the yearbook is prepared for press. Students taking this course work under strict deadlines imposed by the publishing company.

Graphic Design (986)

Credits: 5; Years Offered: 10, 11, 12

Prerequisites: Completion of an online application and instructor approval; "B" or better in freshman computer course.

This course will allow students to explore graphic design and advertising, as well as design concepts of other popular visual communication and design fields. It is intended for students who are interested in future study of design, as well as for those who wish to take the class for personal enrichment. Students will use a "Design Thinking" method of problem-solving, develop hand drawing techniques, and utilize current technology to create both print and digital works. Creation and analysis of student artwork will be balanced with explorations into historical and contemporary practices across the commercial arts. Students will learn to manipulate images and text in Adobe Creative Suite as they create designs for projects such as logos, posters and packaging.

Video Production (996)

Credits: 5; Years Offered: 10, 11,12

Prerequisites: Instructor approval; students will be computer literate and have experience with basic electronic productivity tools.

This course is designed to give students an opportunity to exercise video production skills to produce programs for broadcast such as news shows, documentaries and school and community activities. An introduction to television studio and field production will be provided. Students will learn video basics as well as participate in pre- production, production and post-production stages of video creation, distribution and product evaluation. Work time outside of class is required.

Financial Literacy

Financial Literacy (830)

Credits: 2.5; Year Offered: 12

In this course, students will develop skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment and charitable giving in the global economy. Topics addressed will include setting financial goals, developing and maintaining personal budgets, understanding credit management and consumer rights and responsibilities, and learning about the variety of banking and investment options in today's market.

St. Thomas Aquinas High School

MISSION STATEMENT

St. Thomas Aquinas High School is a co-educational college preparatory school of the Roman Catholic Diocese of Metuchen, New Jersey. The school provides an atmosphere in which each individual's God-given abilities are nurtured and developed.

Every student is encouraged to strive for spiritual, academic, social, creative, and athletic excellence through the interaction of a caring community. With Christ as our model, the St. Thomas Aquinas community fosters a uniquely Christian environment.

Each individual can grow in self-esteem, in social and moral responsibility, and in those values needed to face the challenges of tomorrow's world.