

SAINT THOMAS AQUINAS HIGH SCHOOL

2009-2010
Curriculum Guide



2121 Reno Drive NE
Louisville, Ohio 44641

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www.stahs.org

MISSION STATEMENT

As a Roman Catholic High School in the Diocese of Youngstown, in honor of St. Thomas Aquinas, we value scholarship and excellence in all that we do.

We are a college preparatory high school whose primary purpose is to educate and prepare our students in all areas of academics, extracurricular activities and service activities, while at the same time being firmly rooted in Christian values.

Our school tradition is to give to the world community as we pursue truth and journey toward the kingdom of God.

We are committed to challenging each individual student to live up to his or her full potential, and to become a person fully engaged in mind, body, and spirit.

We seek to instill, in our school community, respect, integrity, justice, and responsibility.

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Louisville, Ohio 44641
Phone: 330-875-1631 Fax: 330-875-8469
www.stahs.org
School code: 363-082*

*President
Principal*

*Fr. Thomas P. Dyer
Mr. Joseph C. Vagedes*

St. Thomas Aquinas High School is an educational community of students, faculty, parents, and clergy committed to seeking Truth and Excellence as an extension of the Catholic Church community. The school provides an environment in which the teaching, learning and application of Christ-centered values in the Catholic Faith traditions encourages and fosters religious maturation, academic growth, and social development among all members of the St. Thomas Aquinas High School community. The school is committed to serving the spiritual and educational needs of the community. It exists to serve by preparing its students to become effective members of the Christian community as well as the larger world community of which they are a part. "QUALITY CATHOLIC EDUCATION IN A UNIQUE CHRISTIAN COMMUNITY SETTING" is truly what makes St. Thomas Aquinas High School an institution striving for excellence.

This booklet contains descriptions and other pertinent information regarding course offerings at St. Thomas Aquinas High School. This includes information about graduation requirements, the guidance department, advanced course programs, the Post Secondary Enrollment procedure, and the policy on course failures. Course descriptions are listed alphabetically by department: Art, Business and Technology, English, Health Education, Languages, Mathematics, Music, Religious Education, Science, Social Studies, and Technical Studies. Course work has been developed to provide a spectrum of required and elective classes. The St. Thomas Aquinas High School curriculum is designed to meet the needs, goals, and skills of a diverse student body.

GRADUATION REQUIREMENTS

Twenty-four credits in the following areas are required for graduation for students graduating in 2008, 2009, and 2010.

- 4 credits of Religious Education (1 unit for each year of attendance at St. Thomas Aquinas)
- 4 credits of English
- 3 credits of Social Studies (Government, United States History, and World History)
- 3 credits of Science (Physical Science, Biology and one credit of Earth Science, Chemistry, or Physics)
- 3 credits of Mathematics
- $\frac{1}{2}$ credit of Physical Education
- $\frac{1}{2}$ credit of Health
- 6 credits of Electives

Beginning with the graduating class of 2011, students will be required to complete 27 credits in order to graduate. This includes an additional credit in math and social studies.

The call to Christian service is a part of our mission. Each St. Thomas Aquinas student is required to participate in service work each year they attend St. Thomas Aquinas. Students receive one quarter (.25) credit for each year's successful completion of the service component. This is a requirement for graduation from St. Thomas Aquinas.

Students must also pass all five sections of the Ohio Graduation Tests in reading, mathematics, writing, science and social studies.

PHILOSOPHY OF GUIDANCE

We believe that each student in our school is a unique individual and is capable of significant growth and development. We assist the child in this growth and development, in cooperation with the parents, by our educational programs developing the spiritual, intellectual, moral, social, cultural, and physical aspects of each student. We believe in the integrity, worth, and dignity of each child, in his/her uniqueness and individuality; we strive to plan and execute those educational programs which will develop in each child an appreciation of himself/herself and others.

We endeavor to nurture attitudes, concepts, skills, and talents that will help in developing self-discipline, accepting responsibility for the direction of his or her life, striving to attain a meaningful role in the world and becoming part of society's mainstream. The effectiveness of this philosophy depends upon the cooperative efforts of the administrators, the classroom teachers, parents, and other pupil personnel workers.

GUIDANCE OBJECTIVES AND GOALS

The guidance and counseling department has developed objectives and goals for each grade level. The following serves as a representation of some of the activities but is not intended to be all-inclusive:

- Transition to high school
- Course selection for four years
- Explanation and interpretation of tests (PLAN, PSAT, ASVAB, Ohio Graduation Tests)
- Distribution of college admission test information (ACT, SAT, SAT II)
- Job search skills/career exploration
- College search and application review
- Library computer program search
- Development of study skills
- Processing of applications, transcripts and recommendations
- Academic and personal counseling
- Interviews with parents, teachers and students
- Post Secondary Enrollment Option
- Arranging tutoring with Special Services

ADVANCED PLACEMENT PROGRAM

An Advanced Placement course is a special college-level experience that most often takes a full academic year. It can take the form of an honors class, a strong regular course, a tutorial or an independent study, taught or supervised by teachers trained by the College Board. Advanced Placement courses provide the student with the opportunity to do college work on the high school level. These courses are geared to challenge and stimulate interested, motivated and gifted students. They are demanding courses very often involving independent study. In May of each year, the College Board administers Advanced Placement tests. Depending on his/her score on this test, the student may receive advanced placement in that field. In some cases, the student will receive actual college credit as well as advanced placement.

While many colleges recognize Advanced Placement scores, the student should check his/her college's catalog to determine its policy on Advanced Placement scores. Besides the possibility of gaining college credit or advanced placement in college courses, Advanced Placement courses enable the student to pursue in greater detail a subject or subjects in which he/she is interested. These courses provide excellent preparation for college work. At St. Thomas Aquinas, Advanced Placement courses are offered in Calculus AB, Physics, United States History, Psychology, and Human Geography.

HONORS PROGRAM

The highly motivated and gifted student will be invited to take honors courses. This invitation will be extended based on standardized test scores, academic performance and teacher recommendation. Presently, honors courses are offered at the junior level in Science, Social Studies, Math, and English. Senior level honors courses are offered in Science, Math, Foreign Language, Social Studies, and Senior Religion. Admission to this program does not insure that the student will be invited into other honors courses since each course is considered on an individual basis.

POST-SECONDARY ENROLLMENT OPTION

St. Thomas Aquinas High School, in collaboration with Walsh University, offers a Post-Secondary class to seniors who are in honors English. Students receive both high school and college credit while taking the class on the St. Thomas site. In addition, St. Thomas participates in Ohio's Post-Secondary Enrollment Options Program (PSEOP). Students in grades 9-12 must notify St. Thomas Aquinas High School by February 28th if they are interested in PSEOP.

POLICY ON FAILURES

Any required course not passed in full during the school year must be made up in summer school prior to the start of the following school year or that student may not be re-admitted to St. Thomas Aquinas High School, subject to administrative decision. Students and parents are given information regarding options for completing the make up work.

COURSE DESCRIPTIONS

** Please note: For those classes that require a prerequisite, the prerequisite must be passed, not merely attempted.*

ART

Our Art Education program provides an opportunity to foster personal expression. Students are exposed to a variety of media and visual experiences that help foster Christian values, personal development and creativity.

ART I is a one-semester foundation course which will provide a semester of basic studies in the techniques, methods and concepts of the visual arts. Students will be using various media in drawing, design, color, lettering and perspective. This course encourages self-expression and development of basic art skills. An end-of-quarter sketch book will be required.

.05 credit

(9, 10, 11, 12)

ART II is a one-semester course and is a continuation of Art I, emphasizing in depth the various techniques, methods and concepts used in the foundation program. Areas will include drawing (various media), painting (watercolor & acrylic), and illustration. An end-of-quarter sketch book will be required.

0.5 credit

Prerequisite: Art I

(9, 10, 11, 12)

ART III deals with projects of special interest to the student. Students will do studio and independent work, art displays, art shows (school and community), portfolio preparation and matting. This course is recommended for students who are considering art as a career or are interested in developing and furthering their art talents. A sketch book will be required at the end of each quarter.

1 credit

(10, 11, 12)

Prerequisite: Art I & II, Teacher Recommendation

ART IV (Advanced Art) is geared to challenge and stimulate the interested and talented student. This course is recommended for students who are considering art and related fields as a profession. This course will involve specific and independent studio work projects. A variety of media and subjects will be covered. The instructor will guide and help students with their individual projects. Project critiques will be incorporated throughout the course. Portfolios will be compiled for those students who require them for college admission. A sketch book will be required at the end of each quarter.

1 credit

(10, 11, 12)

Prerequisite: Art I, II, III and strong teacher recommendation.

SCULPTURE AND DESIGN is a one semester course where students will be working with varieties of 3 dimensional art forms. This course will enable students to construct, view and understand 3D art. Emphasis will be placed on the use of techniques that are integral to using and understanding sculpture, clay, assembly, plaster, wood, paper and cardboard.

0.5 credit *Prerequisite: Art I, Teacher Recommendation*

(10, 11, 12)

DRAWING AND PAINTING is a one semester course where students will be able to learn and develop their skills in both areas of painting and drawing. Media used will be pencil, pastels, acrylics, watercolors, oils, and mixed media. This class offers an opportunity to investigate drawing as an independent process of art making. The emphasis on painting is placed on color, value, illusion of form and space, composition and paint application.

0.5 credit *Prerequisite: Art I and Teacher Recommendation*

(10, 11, 12)

BUSINESS AND TECHNOLOGY

ACCOUNTING I is a one-semester course that introduces the student to accounting principles. Emphasis is placed on journals, ledgers, balance sheets, income statements and worksheets. This course focuses on proprietorship service businesses. Computer enrichment projects will be used as supplements to lay the groundwork for future coursework.

0.5 credit

(10, 11, 12)

ACCOUNTING II is a one semester course that is a continuation of Accounting I. This course focuses on merchandising accounting including inventory depreciation and advanced income statement ratios. This course will be taught using automated accounting that will give the students real world and future college preparation. This course is

recommended for any student interested in majoring in business or who has an interest in business operations.

0.5 credit Prerequisite: Accounting I

(11, 12)

CONSUMER RIGHTS is a one semester course that focuses on resource management, personal decision making, insurance, credit management and consumer protection. Students will explore these concepts in depth and will also focus on the American consumer and the impact of international trade on Americans. This course is designed for students who are interested in business or in real life business applications.

0.5 credit

(10, 11, 12)

MICROSOFT WORD EXCEL AND POWERPOINT is a one semester course presenting keyboarding fundamentals focusing on speed and accuracy, along with sorting, creating charts and tables, and merging form documents. All submenu functions will be utilized and explored. While keyboarding speed will be a focus, numbers will be added in the Excel program to enhance the menu and application data. The third part of the course will focus on presentations in Powerpoint utilizing Word and Excel as the foundations of creating and important data.

0.5 credit

(9, 10, 11, 12)

BUSINESS COMMUNICATIONS is a one semester course that will focus on creating business and personal documents, understanding the desktop publishing process, creating letterheads, envelopes, business cards, and scanning documents. In addition, focus will be placed on preparing promotion forms used in business as well as Powerpoint. Video forms of media will be created. This course will also utilize objective testing in communication and business etiquette skills.

0.5 credit

(10, 11, 12)

COMPUTER PROGRAMMING is a one semester course designed as an introduction to computer science. The student will learn to write programs and manipulate problem-solving techniques using a foundation language to help create a high level of analytical and critical thinking. In addition, graphics, sound, and visual effects will be covered in-depth.

0.5 credit

(10, 11, 12)

BUSINESS LAW is a one semester course that explores the U.S. courts in the context of business operations and legal aspects of office procedures. Students will explore case studies that will explore ethical business practices and management techniques. Problem solving and analytical thinking skills will be developed through individual research studies and presentations.

0.5 credit

(10, 11, 12)

INVESTMENTS AND CAREER EXPLORATION is a one semester course that combines career knowledge along with financial understanding of the many investment options that are available. This course will focus on money management, credit and the law, investments, and budgeting. Students will be able to recognize financial terms while being exposed to stock trading through a business simulation project.

0.5 credit

(10, 11, 12)

BUSINESS MANAGEMENT AND SALES is a one semester course that combines management techniques coupled with marketing knowledge to give the student a broad understanding of the disciplines. This course will discuss marketing functions, buyer behavior, marketing research and segmentation, product and pricing, channels of distribution and international marketing. The student will also learn managerial methods that are necessary to execute proper marketing techniques. This course is designed for the student who is interested in the field of marketing or wishes to pursue a career in business.

0.5 credit

(10, 11, 12)

ECONOMICS is a one semester course which studies the management of government affairs, individual and social income, supply and demand, limitation of resources, costing procedures, expenditures and the Federal Reserve Banking System. The student will also gain knowledge of business cycles, bull and bear markets, as well as an understanding of the impact of international economic conditions in the United States. This course is intended for the college-bound students to give him or her background in the field of economics.

0.5 credit

(11, 12)

ENGLISH

INTRO TO LITERATURE AND COMPOSITION is a course which integrates literature and writing. The student will practice and develop essential reading skills as he/she explores the various types of literature, both fiction and nonfiction. General characteristics of each form will be studied. As the student studies the literature, he/she will sharpen his/her writing skills while going through the writing process. As the student edits and revises his/her work, he/she will review essential grammar information. The focus will be on writing effective sentences, paragraphs and compositions.

1 credit

(9)

WORLD LITERATURE is a study of the literature of the Western World including Ancient Greece, the Renaissance, and Modern Europe. A general review of grammar and punctuation in preparation for the Ohio Graduation Test occurs as the student works

through the writing process. The course also includes an overview of the six parts of a novel and a study of composition, culminating in the writing of a research paper.

1 credit

(10)

AMERICAN LITERATURE is a chronological study of our literature from colonial to contemporary times. This course examines the cultural and historical forces that shaped and continue to shape our literature and the writers who have created and continue to create a national literature. Writing skills continue to be developed within the context of the writing process.

1 credit

(11)

HONORS AMERICAN LITERATURE is a course designed for the junior who is highly motivated and competent in literary and writing skills. This course is a more in depth and critical chronological study of our literature from colonial to contemporary times. In addition, during the study of writers who have created and continue to create a national literature, the student will develop extensive literary and writing skills.

1 credit

(11)

Prerequisites: 3.75 quarterly averages in English classes through freshman year and first half of sophomore year. Summer reading of an American novel and play, with writing assignments is due during the first two weeks of school. Failure to maintain a B average by the 4.00 scale during first semester of junior year may result in placement in regular American Literature class for the second semester. Office permission is also required.

BRITISH LITERATURE is a chronological study of the literature of Great Britain. While studying the literature, the student will analyze the writing process from pre-writing to composing to revising. In the process of understanding and mastering this process, the student will learn ways of achieving adequate development, conciseness, coherence, and unity in his/her papers. This course culminates with the writing of a research paper.

1 credit

(12)

POST-SECONDARY ENGLISH is an on site college post-secondary course. Students in this class will receive three semester-hours of college English credit from Walsh University for each semester of this course, in addition to receiving high school English credit. The students in this course will be enrolled at Walsh University with all the privileges given any full-time student. Also, English professors from Walsh will be guest speakers at different times throughout the year. The only cost for the student will be for transcripts.

This course is a combined writing and literature course. The writing section strives to allow the students to achieve greater effectiveness and facility as writers. The students will analyze and examine the elements of writing in their own and other people's writing. In the first semester, the students will receive extensive practice in persuasive,

expository, and expressive writing. Integrated into this course will be a survey of British Literature. This literature will provide a framework in which the students can become not only better writers, but also more critical readers. In the second semester, the students will receive extensive practice in writing summaries, argumentative essays, and research papers.

1 credit

(12)

Prerequisites: 3.75 quarterly averages in English classes through freshman and sophomore years and through first half of junior year. Summer reading of a British novel and play, with writing assignments is due during the first two weeks of school. Honors American Literature is also required.

SPEECH is a one semester course which covers the basic communication skills of speaking, listening, and reading aloud to develop attitudes of confidence and security toward all types of oral communication.

0.5 credit

(9, 10, 11, 12)

INTRODUCTION TO MASS MEDIA is a one semester preliminary course designed to acquaint the student with different forms of media in today's society. The student will gain experience in the use of all iLife 08 programs while working with digital video and still cameras, video production and editing, iWork and PowerPoint presentations. Fundamentals of journalism, public relations and ethic will be discussed.

0.5 credit

(10, 11, 12)

VISUAL COMMUNICATIONS is a one semester course that builds on applications learned in Intro to Mass Media. Projects will be produced in iLife and iWork programs on our iMac computers. Extensive video projects in various subject areas along with pod casting, desktop publishing for The Lance, and web page design will be produced by each student. Fundamentals of copyright will also be covered.

0.5 credit

(11, 12)

HEALTH EDUCATION

HEALTH EDUCATION is a one semester course designed to introduce the student to the concept that health is a lifelong process. This course is also structured to enhance and expand the knowledge relating to health that the student may have been exposed to in previous courses. Health is a course that touches upon many facets of the student's life (physical, mental, and social) and attempts to offer problem-solving techniques or knowledge for use in his/her life in the present and in the future.

0.5 credit

(9)

PHYSICAL EDUCATION I is a one semester course which emphasizes the demonstration of fundamental skills involved in team activities and the improvement of the level of physical fitness of each individual student. Skill tests and physical fitness tests will be used to determine each student's level at the end of each semester.

0.25 credit

(9)

PHYSICAL EDUCATION II is a one semester course which emphasizes the demonstration of fundamental skills in team and some individual activities. Emphasis is also placed on achieving a higher level of physical fitness for each student. The student is also introduced to lifetime activities and encouraged to achieve a high proficiency level in skills associated with these activities.

0.25 credit

(10)

PRICIPLES OF FITNESS is a one semester course designed to enhance the individual's awareness of the importance of physical fitness and strength training. The student will learn and understand what total physical fitness means, what its components are, and the need to maintain an exercise program throughout life.

0.5 credit Prerequisite: Office Permission

(10, 11, 12)

LANGUAGES

SPANISH I is a course which provides the student with an opportunity to acquire the communication skills of the language. The students are introduced to listening, speaking, reading and writing skills. The students will be introduced to the culture, customs and ways of life of the people whose language they are studying.

1 credit

(9, 10, 11, 12)

SPANISH II is a course which continues to develop the four language skills in Spanish I: listening, speaking, reading and writing. This is done through a study of language patterns and grammatical structures. Knowledge of all basic grammar learned in Spanish I is essential. The students continue to gain knowledge of the civilization, culture, customs and ways of life of the people whose language they are studying.

1 credit Prerequisite: Spanish I

(9, 10, 11, 12)

SPANISH III is a course that provides the students with the opportunity to apply the skills learned in Spanish I and II in a class conducted extensively in Spanish. Reading skills are developed through the use of short story selections. The video series, "Destinos", is used to practice listening skills. Question-and-answer sessions continue the development of listening and speaking skills. The students enhance writing skills through

journal writing. Advanced grammar and the geography, culture and customs of the Spanish-speaking world are studied.

1 credit *Prerequisite: B average in Spanish II*

(10, 11, 12)

HONORS SPANISH IV is a course that provides the students with the opportunity to continue developing listening, reading, writing, and speaking skills in a class conducted extensively in Spanish. A selection of short stories is used to enhance reading skills. Through the use of Part II of the video series, "Destinos", listening skills are enhanced; question-and-answer sessions continue the development of listening and speaking skills. Writing skills continue to develop through the use of telecommunications (e-mail pen pals) in the foreign language lab. The history, culture, customs, and lifestyle of the Spanish speaking world are studied.

1 credit *Prerequisite: B average in Spanish III*

(11, 12)

CONVERSATIONAL SPANISH (one semester) is a course that provides the opportunity for the student to master the mechanics and rhythm of the Spanish language. Students will be encouraged to first begin speaking, rather than mentally translating their English language statements into Spanish before speaking. Only in this manner will the students begin to think and spontaneously construct in Spanish. These skills will be acquired through a diverse set of activities: question-and-answer, improvisational and prepared skits, reading aloud, songs, humor, games, proverbs, idioms, television, movies, current events, and small group discussion. This is for students who desire to polish their Spanish pronunciation, as well as, their listening skills and comprehension.

0.5 credit

(11, 12)

Prerequisite: B average in Spanish III and enrollment in Spanish IV

ITALIAN I provides students with an opportunity to acquire the clear explanation of the basic structures of the language, plenty of examples to illustrate these structures, dialogs and authentic real stories from the text series *Forza Uno!* to strengthen reading skills and exercises to help the students consolidate what has been introduced. The elements of the written and spoken language are interwoven together through reading, writing, and listening to audio materials.

1 credit

(9, 10, 11, 12)

ITALIAN II is a course that continues to develop the four language skills acquired in Italian I; listening, speaking, reading, and writing. Knowledge of all basic grammar learned in Italian I is essential. The students continue to learn authentic patterns of effective oral and written communication with greater sophistication of structure and expression. The students continue to gain knowledge of the civilization, culture, customs and ways of life of the people whose language they are studying.

1 credit *Prerequisite Italian I*

(10, 11, 12)

ITALIAN III is a course that continues to develop the four language skills acquired in Italian I and II. This course enables the students to communicate more effectively, both orally and in writing, on a variety of themes of interest to young people. The students continue learning new techniques of written and oral prose expression. Advanced grammar, geography, novelettes selected from *ForzaIII, Giocare con la Letteratura* and listening to tape cassettes enable the students to acquire an excellent understanding of Italy and its Italian culture. This course is conducted mainly in Italian.
1 credit *Prerequisite Italian II* (11, 12)

HONORS ITALIAN IV is an advanced course that integrates grammar, civilization, history, and literature. Honors Italian IV is a class conducted extensively in Italian. A selection of novels in *Giocare con la Letteratura* in combination with ask and answer sessions are applied to heighten reading skills. The use of audio materials develops and enhances listening and speaking skills. Through self-expression and writing activities, the students build a communicative approach to mastering the language. The students view related films (including works of art) that lend richness and understanding of the culture, customs and lifestyles of the Italian speaking world.
1 credit *Prerequisite: B average in Italian III* (12)

MATHEMATICS

MATH COURSE PROGRESSION: The following presents the various math sequences in which a student may be enrolled. Based on assessment, students begin freshman math in one of the courses marked with an asterisk, and proceeds through courses to the right for the following years. Movement up or down within a column is possible, based on student assessment.

*Gen Math	Bas Alg	Bas Geo	Alg 2
*Bas Alg	Bas Geo	Alg 2	Math App
*Alg 1	Geo	Alg 2/Trig	PreCalc
*Geo	Alg 2/Trig	Hon PreCalc	H/AP CalcAB

Statistics and Discrete Mathematics are also available for seniors.

GENERAL MATHEMATICS is a study of basic mathematical concepts for the student needing reinforcement in the arithmetical operations. This course emphasizes the building of skills through repetition. Special emphasis is given to promoting competence and confidence. Upon completion of this course, the student is eligible to enroll in the Basic Sequence or the General Mathematics Sequence.

1 credit *Prerequisite: Office Permission* (9, 10, 11)

BASIC ALGEBRA includes a discussion of all major Algebra I concepts. However, concepts are developed at a slower pace and in less depth than in Algebra I. It is designed to provide the student who often has had difficulty in math with an opportunity for success while exposing him/her to higher levels of abstract reasoning.

1 credit *Prerequisite: Office Permission* (9, 10)

ALGEBRA I stresses the basic structure of the real number system. It provides an opportunity for the student to apply algebraic concepts and skills and encourages the student to appreciate the need for precision in language.

1 credit *Prerequisite: Office Permission* (9, 10)

BASIC GEOMETRY is a course designed for the student who would normally have difficulty with a standard course in Geometry. It provides a simple, yet thorough, introduction to Euclidean Geometry. Proof writing is emphasized less, and lessons are more activity-orientated than in a standard geometry course.

1 credit *Prerequisite: Basic Algebra or Algebra I, Teacher Recommendation* (10, 11, 12)

GEOMETRY is designed to provide the student with an understanding of the structure of plane geometry. The course stresses both deductive and inductive reasoning from information provided visually as well as axiomatically. Algebraic skills related to geometry are reinforced.

1 credit *Prerequisite: Basic Algebra or Algebra I* (9, 10, 11)

ALGEBRA II is a third-year course which follows Basic Algebra and Basic Geometry. It is a course which emphasizes linear and quadratic equations. Working with exponents, variables, and rational expressions is developed for use in science. Word problems are used to emphasize the application of algebraic skills in practical problems. An introduction to trigonometry is included in this course.

1 credit *Prerequisite: Basic Algebra, Basic Geometry, Teacher Recommendation* (11, 12)

ALGEBRA II WITH TRIGONOMETRY follows Algebra I and Geometry. It is a course which emphasizes linear and quadratic equations. Accuracy in working with exponents, variables, and rational expressions is developed for use in science and advanced math. Word problems are used to emphasize the application of algebraic skills in practical problems. Trigonometry stresses the application of the trigonometric relationships from both the unit circle and right-angle definitions. A graphing calculator is required for this course.

1 credit *Prerequisite: Algebra and Geometry* (10, 11, 12)

HONORS PRE-CALCULUS is designed to prepare students for college level calculus. Emphasis is placed not only on computational skills, but on the understanding of the concepts underlying the mathematical procedures. The major content areas include the

real number system, logic, analytic geometry, sequences, limits and functions (polynomial, exponential, and logarithmic) with an introduction to differential calculus. **A graphing calculator is required for this course.**

1 credit

(11)

Prerequisite: Geometry and Algebra II with Trigonometry, Teacher Recommendation

MATH APPLICATIONS is a course designed for the college-bound senior who has either had little exposure to or little retention of algebra concepts. In this course, most concepts are redeveloped through the use of applications from the real world.

1 credit

Prerequisite: Teacher Recommendation

(12)

PRE-CALCULUS is designed to prepare the student for college level calculus. Emphasis is not only on computational skills, but on the understanding of concepts underlying the mathematical procedures. The major content areas include the real number system, logic, sequences, and functions (polynomial, exponential, and logarithmic). A graphing calculator is required for this course.

1 credit

(11, 12)

Prerequisites: Geometry, Algebra II with Trigonometry, Teacher Recommendation

HONORS/AP CALCULUS AB is designed for the student with a demonstrated interest in engineering, economics, life sciences, mathematics, or the physical sciences. It is intended to present enough subject matter with sufficient conceptual depth to allow the entry-level college student the option of testing out of Calculus I. The course offers a review of important algebraic and geometric constructs needed for a study of calculus. This background lends itself to a complete examination of three major topics: limits, differentiation, and integration. These topics are looked at separately and then in relation to specific functions such as logarithmic, exponential, and trigonometric. Special consideration is given to practical applications relative to each idea. This course is recommended for high ability students only. **A graphing calculator is required for this course.**

1 credit

(12)

Prerequisites: Minimum B average in Honors Pre-Calculus, Teacher Recommendation

STATISTICS AND PROBABILITY is a course designed for the student who has completed pre-calculus or demonstrated high success in Algebra II with Trigonometry. It may be taken instead of, or in conjunction with, AP Calculus AB or Pre-Calculus. The content of the course will include representing data graphically, summarizing data statistically, and analyzing samples, measures of central tendency, the normal distribution, confidence intervals, and hypothesis testing. It will also include basic concepts of probability. A graphing calculator is required for this course.

1 credit

(12)

Prerequisites: Algebra II with Trigonometry, Teacher Recommendation

DISCRETE MATHEMATICS is designed for the student who has completed pre-calculus. It may be taken instead of, or in conjunction with AP Calculus AB. The content of this course will be a topical study in the following areas, sequence and series, conics, vectors and determinants, polar coordinates, combinatorics, programming on the graphing calculator and a review of trigonometry.

0.5 credit

(12)

Prerequisites: Pre-Calculus, Teacher Recommendation

MUSIC

CHORUS is a course designed to teach the basics of voice production. Ensemble singing will be stressed through the use of music of different styles and historical periods. Some music theory will be included. A small number of out-of-school performances are required.

0.5 credit per semester

(9, 10, 11, 12)

INSTRUMENTAL MUSIC is a course designed to teach the basic fundamentals of instrumental music. The course consists of marching band (first semester) and concert band (second semester).

0.5 credit per semester

(9, 10, 11, 12)

RELIGIOUS EDUCATION

RELIGIOUS EDUCATION 9: In the first semester of the year, students study an introduction to the Old Testament, designed to deepen each student's appreciation of God's care and activity in his/her life. Concentrating on Genesis, the Prophets, and the story of God's covenant with the Chosen People, the freshman student will understand more fully the connection between the Hebrew people, God and him/herself as a person of faith. In the second semester, the student encounters the origin and development of the Catholic Church historically. The student traces the history of the Church from Pentecost to the major changes of Vatican II and the present. A detailed study of the Reformation is presented with an ecumenical spirit. It is believed that the students' faith can develop on a more solid base through a knowledge and understanding of the Church's history.

1 credit

RELIGIOUS EDUCATION 10 begins with an introduction to the New Testament that concentrates on Jesus as the centerpiece of faith. Beginning with an overview of Christian Scriptures that includes the origin, content, development and purposes of the gospels and epistles, students will explore the message and meaning of Jesus' life, death, and resurrection in the early church and for us today. In the second semester, the study of morality is designed to communicate to the student the principles on which Christian

morality rests and to support him/her in the effort to apply these principles in daily life. It also looks at the process of decision making and moral development.

1 credit

RELIGIOUS EDUCATION 11 begins with a survey of eastern, western, and primitive religions. It intends to open the student up to other traditions as well as provide him/her with a fresh look at his/her own by comparing Christian practice and belief to other religious expressions. The phenomena of cults and the occult will be examined. This is followed in the second semester by a study of social justice designed to awaken the student to the social dimensions of Christian faith and to empower him/her to begin to respond to the issues of our day through critical reflection and conscience formation. The course is structured around the essentials of a just society namely shared power and equitable distribution of resources. Scripture, Papal Encyclicals, and statements by USCCB enrich the presentation.

1 credit

RELIGIOUS EDUCATION 12 first covers understanding and using the Bible, taking the student through the Bible, showing what the content is about and how the Church uses Scripture in liturgy, personal prayer, and Bible study. The Book of Revelation and other books not emphasized in earlier courses will be stressed. In the second semester, senior students will investigate and reflect upon Catholic Christian living and what it means to live a happy, fulfilling, and meaningful life. Taking Jesus as a role model, students will identify and reflect upon the virtues, character traits, and skills that will point them to choose a self directed vocation. Through taking personality tests, honing self awareness skills and talents, and finishing the semester with a lifestyle project, students will have a more realistic understanding of who they are and where they are going in life as they leave high school upon completion of this course. Examining ordained and religious life, as well as being married and single, are components of this class. A review of morality and ethics completes the course agenda.

1 credit

HONORS SENIOR RELIGION engages the students in an in-depth exploration of selected topics of the Catholic faith. By studying the Catechism of the Catholic Church, selected Church documents, major writings of recent Popes, and philosophical resources, the students will develop a deeper understanding of and appreciation for the richness of Catholic teaching and tradition. This study will enable the students to apply the Catholic perspective to contemporary issues. Among the topics to be covered are Liturgy and Sacraments, Catholic spirituality, Foundations of Moral Theology, Faith, Creed, and Divine Revelation, the Call to Holiness and the Discernment of Life Vocations. More writing will be demanded in this course than in other religion course.

1 credit

Prerequisite: 3.75 average in Religion and English at the end of the first semester of junior year, Teacher Recommendation

SCIENCE

FOUNDATIONS OF SCIENCE is an introductory course which stresses a generalized understanding of all the sciences. This course will focus on the study of chemistry, earth science and physics including metric conversions, basic chemical properties and laws, basic chemical reactions, forces of nature, work, energy, heat, electricity and magnetism, earth materials, weather and astronomy. It is required for all incoming freshman as a foundation for later courses.

1 credit

(9)

ADVANCED FOUNDATIONS OF SCIENCE covers the same topics as does Physical Science, but covers them in more depth and at a higher mathematical level. It is intended for the freshman with an outstanding skill in this area, based on entrance exams and interview.

1 credit *Prerequisite: Teacher Recommendation*

(9)

BIOLOGY is a study of living organisms and the environment in which they exist. Topics receiving special emphasis include basic biochemistry, cell biology, genetics, evolution, taxonomy, bacteriology, virology, ecology, and biotechnology. The interdependence of all organisms and the dependence of all organisms of their environment will provide unifying undercurrents for the discussion of these topics.

1 credit *Prerequisite: Foundations of Science*

(10)

ADVANCED BIOLOGY follows the same syllabus as the general class, but emphasis is placed on practical field application of acquired knowledge, detailed analysis of current trends within biological fields, and original synthesis of thoughts pertaining to biology.

1 credit

(10)

Prerequisites: Foundations of Science or Advanced Foundations of Science, Teacher Recommendation

CHEMISTRY is a course which emphasizes the broad spectrum of chemical knowledge including English to metric conversion, atomic and electron structure, atomic symbols with periodic trends and functions, chemical naming and bonding, equation writing by rules and problem solving, gas laws, acids, bases and salts, solution process and organic chemistry of hydrocarbons. Lab work is an integral part of this course.

1 credit

(11, 12)

Prerequisites: Biology and Enrollment in or completion of Algebra II

HONORS CHEMISTRY is a course which emphasizes the broad spectrum of chemical knowledge including English to metric conversions, atomic and electron structure, atomic symbols with periodic trends and functions, chemical naming and bonding, equation writing

by rules and problem solving, gas laws, acids, bases and salts, solution process and organic chemistry of hydrocarbons. This course meets the curriculum requirements for an introductory course in chemistry. Lab work is an integral part of the course. The research and problem solving in this course is done in greater depth than in regular chemistry course. The students also deal with the topic radioactivity.

1 credit

(11, 12)

Prerequisites: Advanced Biology, Completion of or enrollment in Algebra II, and Office Permission

PHYSICS is a course that introduces students to the fundamental laws that govern the behavior of the nonliving universe. Major topics include description and prediction of motion, types and effects of forces, energy and its transfer, heat and temperature, wave behavior, sound, light, and electricity. Experience is an essential part of the course. It is required that the students have a scientific calculator.

1 credit

(12)

Prerequisites: Algebra II with Trigonometry and Chemistry

HONORS PHYSICS covers the same topics as Physics, but requires a more advanced mathematical skill and more independent research and analysis. Students are required to have a scientific calculator and are expected to do research papers on topics of interest. Applications to everyday life and to engineering are an integral part of the course. This course is recommended for students planning a career in any engineering or related field.

A graphing calculator is required for this course.

1 credit

(12)

Prerequisites: Honors Chemistry, Algebra II with Trigonometry, Completion of or enrollment in an Honors Math Class, and Teacher Recommendation

AP PHYSICS B is an accelerated course which stresses a college level approach to physics and an extensive mathematical analysis of physical relationships. The course follows the requirements of the College Board for content and requires formal laboratory reports and in-depth analysis. This course is strongly recommended for students planning a career in any area requiring significant college physics content. **A graphing calculator is required for this class.**

1 credit

(12)

Prerequisites: Honors Chemistry, Algebra II with Trigonometry, Completion of or enrollment in an Honors Math Class, and Teacher Recommendation

ANATOMY AND PHYSIOLOGY is presented as an exploration of the minds and bodies of human beings. Study emphasizes the skeletal, muscular, cardiovascular, and neural systems and includes all systems of the human body. Students participate in dissection of mammals. Discussions are designed to include topics of interest to young adults and

emphasis on how all systems of the body work together to fashion a fascinating creation, the human being.

1 credit

(12)

Prerequisites: Biology and Chemistry

HONORS ANATOMY AND PHYSIOLOGY follows the same syllabus as the general class, but more emphasis is placed on practical field applications of acquired knowledge, detailed analysis of current trends within anatomical fields, and original synthesis of thought.

1 credit

(12)

Prerequisites: Biology, Honors Chemistry, and Teacher Recommendation

SOCIAL STUDIES

GOVERNMENT AND ECONOMICS is a survey of the American system of government and the political forces which make it operate. The student will learn the historical background of the American political system and be able to compare it to the political systems which exist in other nations. In addition, the course examines the nature of the American economic system and America's role in the global economy.

1 credit

(9)

WORLD HISTORY is a survey of the political, economic, social, and intellectual forces which have shaped the contemporary world. The primary emphasis of this course will be the people, events, and ideas which relate to the modern era.

1 credit

(10)

UNITED STATES HISTORY is a survey of the economic, political, social, and intellectual forces which have shaped the unique character of the American nation. It focuses on the people, ideas, and events that have played a role in this process from the year 1607 to the present, with an emphasis on the people, ideas, and events of the 20th century.

1 credit

(11)

HONORS/ADVANCED PLACEMENT UNITED STATES HISTORY is a survey of the economic, political, and social forces which have shaped the unique character of the American nation. It focuses on the people, ideas, and events that have played a role in this process from the year 1607 to the present. The student will learn to evaluate historical sources and to write the historical essay. The student who takes this course will be prepared for the Advanced Placement American History Examination.

1 credit

(11)

Prerequisites: Upon completion of his or her sophomore year, the student must have a 3.75 grade point average or higher based on a 4.00 scale, in Government and Economics and World History. It also applies to any other academically equivalent social studies

courses transferred to St. Thomas Aquinas from another high school. This average will be determined on the basis of quarter grades.

ADVANCED PLACEMENT HUMAN GEOGRAPHY is a course that introduces students to the systematic study of spatial organization and the processes that have shaped human understanding, use, and alteration of the earth's surface. Students employ spatial concepts and landscape analysis to analyze human social organization, interaction, and their environmental consequences. They also learn about the methods and tools geographers use in their science and practice. Major topics include: the nature of geography and its perspective, population growth and movement, cultural patterns and processes, political organization of space, agricultural and rural land use, industrialization and economic development, and cities and suburban land use.

1 credit

(12)

Prerequisites: Upon completion of his or her junior year, student must have a 3.50 grade point average or higher based on a 4.0 scale in Government and Economics, World History, American or AP Honors American History. It also applies to academically equivalent social studies courses transferred to St. Thomas Aquinas from another high school. This average will be determined on the basis of quarter grades.

CURRENT EVENTS is a one semester survey of contemporary issues based on major news events of the recent past. The course will provide a survey of the necessary background and information so that the student will be able to understand and interpret these issues and develop his/her own opinions regarding them. *Note: students may elect to enroll in this course for one or two semesters.

0.5 credit per semester

(12)

YOUTH & LAW is an introduction to the legal system. It focuses on the steps in the legal process, criminal law, civil law, and major Supreme Court decisions. The course also examines how the law is applied in everyday situations with an emphasis on consumer law, family law, housing law, and constitutional rights. This course promotes student participation in legal argumentation regarding controversial court decisions and student discussion of present legal cases.

0.5 credit

(12)

ADVANCED PLACEMENT PSYCHOLOGY is a course that is designed to introduce students to the systematic and scientific study of behavior and mental processes of human beings and animals. Students are exposed to the psychological facts, principles and phenomena associated with each of the major sub-fields within psychology. They also learn about the methods psychologists use in their science and practice. The course will examine the history of psychology, the development of the major "schools" of psychology, research methods, the biological basis of behavior, sensation and perception, states of consciousness, learning, cognition, motivation and emotion, developmental psychology,

personality, testing and individual differences, abnormal psychology, the treatment of psychological disorders, and social psychology.

1 credit

(12)

Prerequisites: Upon completion of junior year, the student must have a 3.5 GPA or higher, based on a 4.0 scale, in Government and Economics, World History, and United States History or AP/Honors United States History. It also applies to any other academically equivalent social studies courses transferred to St. Thomas Aquinas from another high school. This average will be based on quarter grades.

INTRODUCTION PSYCHOLOGY is a one semester course that is the study of human behavior and personality development. It analyzes the various factors which influence behavior and personality, and the major theories associated with these factors. The nature and problems of abnormal behavior and personality are also explored.

0.5 credit

(12)

SOCIAL PSYCHOLOGY is a course designed to introduce students to the study of human behavior and mental processes as they relate to individuals as a member of society and numerous groups. The course will examine developmental psychology, personality, testing and individual differences, abnormal psychology, the treatment of psychological disorders, and social psychology.

0.5 credit

(12)

SOCIOLOGY explores social concepts and processes including socialization, deviance, social control, and change. It analyzes social stratification, gender roles, and minority groups. The course will also examine the social aspects of such institutions as family, education, economic systems, and government.

0.5 credit

(12)

ADMISSION INFORMATION FOR SOME STATE COLLEGES/UNIVERSITIES IN OHIO

Colleges have varying criteria used in evaluating a student's application for admission. Some programs have different recommended high school courses. Students and

parents/guardians should seek additional information from specific colleges and from the St. Thomas Aquinas Guidance Department.

Many colleges strongly recommend the following core curriculum:

- 4 Units of English
- 3 Units of Math (including Algebra 1, Geometry, Algebra 2)
- 3 Units of Science
- 3 Units of Social Studies
- 2 Units of Foreign Language (must be in the same language)
- 1 Unit of a Fine Art

STUDENT-ATHLETE COLLEGE ELIGIBILITY

The National Collegiate Athlete Association (NCAA) has requirements a college freshman must satisfy to practice or play in a Division I school. A student who is considering practicing or playing in a Division I, II, III, or NAIA school should contact the St. Thomas Athletic Director or Director of Guidance for more information. Listed below are the 16 core courses required for college freshmen to have completed in high school to be eligible for Division I schools only.

- 4 Units of English
- 3 Units of Math (Algebra 1 or above)
- 2 Units of Natural Science (with at least one lab)
- 1 additional core unit in any of the above
- 2 Units of Social Studies
- 4 additional units in any area

Here is some additional information to assist your prospective student athlete (PSA) with NCAA eligibility.

- Student athletes must have ACT/SAT scores sent directly to the Clearinghouse by using Code 9999 on the ACT/SAT registration sheet. NCAA will not accept scores sent from the high school.
- NCAA Clearinghouse registration can only be completed online (www.ncaaclearinghouse.net) and does include a registration fee.