



COURSE CATALOG

SAINTS JOHN NEUMANN AND MARIA GORETTI HIGH SCHOOL

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GENERAL INFORMATION

Program of Studies

The principal goal of SS. John Neumann and Maria Goretti High School is to prepare young men and women to be not only college ready but to thrive in the college environment. The rigorous program of study will also instill an urgency to give back to others. Selection of the proper courses is a serious responsibility and should be done thoughtfully and realistically. Before making selections, students are urged to consult parents, teachers, and counselors.

Curriculum Requirements

To receive a diploma from SS. John Neumann and Maria Goretti High School, a student must successfully complete 24 credits, of which some are mandatory. These requirements are based on those of the State of Pennsylvania, Archdiocese of Philadelphia, and SS. John Neumann and Maria Goretti High School's specific requirements.

General Graduation Requirements

English	4 credits
Theology	4 credits
Social Studies	3 credits*
Mathematics	3 credits
Science	3 credits
Health	.5 credits
Physical Education	.5 credits
Technology Applications	.5 credits
Fine Arts	.5 credits
Electives	5 credits

Every student must take a minimum of **six** (seniors may opt for 5) subject-credits each year. Typical rosters are as follows:

Freshman

Theology 1
English 1
World History
Algebra 1
Physical Science
Technological Communications (.5 credit)
Art or Music Appreciation (.5 credit)
Elective

Sophomore

Theology 2
English 2
American Government & Politics
Geometry
Biology
Health/Physical Ed.
Elective

Junior

Theology 3
English 3
U.S. History
Algebra 2
Chemistry
Electives (1-2 credits)

Senior

Theology 4
English 4
Electives (4-5 credits)

Levels of Study

Within the curriculum, students are assigned by achievement and teacher recommendation to the level of study for which they are best suited. The levels of study are designated as tracks.

Honors – College preparatory courses for students of exceptional ability and industry

AP – Advanced Placement courses, Diocesan Scholars program and dual enrollment programs. All students registered in AP courses are required to take the AP exam.

College Prep – College preparatory courses for students of above average ability

In most subject areas, grouping students by ability has proven to be the best means of adapting instruction to the needs of the students. Such grouping should challenge the above average student to intensive mental activity and relieve the student of lesser ability from the pressures of competition. On the basis of standardized testing, class performance and teacher recommendation, the Assistant Principal for Academic Affairs reserves the right to place a student in a specific track, subject to availability of courses and the restrictions of the master schedule.

Credit

Credits are earned for successfully completing major and minor subjects. With a few exceptions, noted in the course description, courses are worth one credit each. Actual number of credits earned is indicated on the student's roster.

Honors

A student can achieve honors in any track level. Beginning in September 2011, the requirements for honors at SS. John Neumann and Maria Goretti High School are as follows:

First honors – an average of 93 with no grade lower than 90

Second honors – an average of 88 with no grade lower than 85

Also, beginning in September 2011, honors will be based on quarter grades, and will not include the semester average.

Note: Both honors require a conduct grade of no lower than 80.

Course Selection Process

1. After carefully considering the available courses, each student will select courses for the coming year. Students must be certain that they have the credits and courses required for graduation. Students should list an alternative course, for the possibility that their first choice courses do not fit with the master roster. Students are urged to consult teachers and counselors for proper guidance.
2. Students will be given the course selected if they meet the basic requirements of the course and if they receive the necessary teacher recommendation. Conflicts in scheduling may necessitate adjustments.
3. The Academic Affairs Office reserves the right to withdraw any course offering if conditions warrant such a change. Elective subjects are scheduled based upon availability of faculty members and sufficient student demand.
4. **Requests for a specific teacher or period cannot be honored.**

NATIONAL HONOR SOCIETY

Membership in the National Honor Society is based on scholarship, character, service and leadership. Students do not apply for membership, but are invited to apply. Membership is granted to those students selected by the National Honor Society Faculty Council and approved by the Principal. Only Juniors and Seniors are eligible for National Honor Society.

The selection process:

All students must have the following to be academically eligible:

- A **cumulative** average of 90 percent or above
- A **cumulative** quality point average of 39
- Carry at least 6 subjects

Once candidates are identified:

- They must submit an application packet which includes but is not limited to:
 - a personal essay on the provided topic
 - a list of school activities in which the student is an active member
 - faculty recommendations
 - a parent response form
- They must be interviewed by the NHS faculty council.

Final selection

- A five-member National Honor Society Faculty Council makes the final selection for membership in the SS. John Neumann and Maria Goretti High School Chapter of the National Honor Society. The decision of the council is final.

SPECIAL PROGRAMS

COURSES ON-LINE

To expand course selection for students with varied interests, Neumann-Goretti juniors and seniors may register to take on-line AP courses. The school pays this fee unless the student drops this course after the free withdrawal period. The student will be responsible for any withdrawal fees.

- As with any course, failure of an on-line course will affect class standing, and possible participation in graduation.
- Students requesting an on-line course must seek the approval of the Principal/Assistant Principal

DIOCESAN SCHOLARS PROGRAM

905 Diocesan Scholar Courses

Juniors who rank among the top 30 of their class, as determined by cumulative rank in the first semester of their Junior year, are eligible to apply for the Diocesan Scholars Program. Students who are chosen take college courses at participating Philadelphia-area Catholic colleges and universities during Senior year. Students receive both high school and college credit for courses successfully completed. Students interested in this program must speak with the Principal.

COLLEGE INFORMATION

Students who are interested in attending college should make efforts to acquaint themselves with requirements and gear their course selections to this end.

Requirements of colleges vary; however, most colleges include any or all of the following:

1. **High School Record**
2. **G.P.A.**
3. **College Entrance Examinations: SAT I, SAT II, ACT**
4. **Personal Recommendations**
5. **Resumes, including extracurricular activities**

Usually 16 academic credits are required from these areas:

English	4 credits
Mathematics	3 credits
Social Studies	3 credits
Science	3 credits
World Languages	2 to 4 credits
Electives	1 to 4 credits

Some colleges have specific requirements in order for a student to select the program of his or her choice. Early investigation into these requirements helps to avoid additional study before entering college. Students should visit the college web site, or talk to an admissions counselor to determine exact requirements for admission.

THEOLOGY DEPARTMENT

As members of the Theology Department, we recognize each student as a child of God, redeemed through Jesus. As a consequence of this concept, we are aware that we have a sacred trust to assist our students with the process of their own maturing faith. We realize that it is

necessary for them not only to develop their intellects but also their affective natures so that they may come to “full stature in Christ.” With this view in mind, we endeavor religiously to inform, as well as share in the attempt to form in our students their own individual, balanced conscience.

Our program offers opportunities for growth in the important areas of Gospel living as interpreted by the Catholic Church; namely, in the areas of message, community, worship and service. Since our curriculum is well rounded, it has as its main object the adequate preparation of students for the myriad challenges of Catholic living in our multi-faceted society. We believe and teach that principles of faith need to be central to their daily living, not only for being happy, successful members of God’s kingdom on earth, but also and more importantly, for becoming future members of his triumphant kingdom.

011	Theology I - Honors	<i>Gr. 9</i>	1 Credit
012	Theology I – College Prep	<i>Gr. 9</i>	1 Credit

The Revelation of Jesus Christ in Scripture – 1st Semester

This course helps students understand the Sacred Scriptures. The Bible is the word of God where they encounter the living Word of God, Jesus Christ. Students learn about the Bible, its development and content, and how God is its author. Students focus on the Gospels, where they grow to know and love Jesus more personally.

Who is Jesus Christ? – 2nd Semester

This course helps students understand the person and message of Jesus Christ. He is the living Word of God, the Second Person of the Blessed Trinity. He is the ultimate Revelation about God, from God. Students penetrate the mystery of the person of Jesus and who he calls them to be.

021	Theology II - Honors	<i>Gr. 10</i>	1 Credit
022	Theology II – College Prep	<i>Gr. 10</i>	1 Credit

The Mission of Jesus Christ (The Paschal Mystery) – 1st Semester

This course helps students understand all that God has done for humanity through his Son, Jesus Christ. God has planned, from all eternity, for human beings to share everlasting happiness with him. This is accomplished only through redemption in Christ. Students inquire about the meaning of being a disciple of Christ.

Jesus Christ’s Mission Continues in the Church – 2nd Semester

This course helps students understand that they encounter the living Jesus Christ in and through the Church. The Church was founded by Christ through the Apostles. It is sustained by him through the Holy Spirit. The Church is the living Body of Christ. Students explore the Church as a mystery which has both human and divine elements.

031	Theology III - Honors	<i>Gr. 11</i>	1 Credit
032	Theology III – College Prep	<i>Gr. 11</i>	1 Credit

Sacraments as Privileged Encounters with Jesus Christ – 1st Semester

This course helps students understand that they can meet Christ today in and through the sacraments. Each sacrament, particularly the Eucharist, is a means to a full and real encounter with Christ. Students examine each sacrament in detail so as to learn how they may encounter Christ throughout life.

Life in Jesus Christ – 2nd Semester

This course helps students understand the moral life. Only in Christ can human beings discover the fullness of life. Disciples of Christ are guided by moral concepts and precepts of Christ and his Church. Students probe these moral teachings and reflect upon their implications.

041	Theology IV - Honors	<i>Gr. 12</i>	1 Credit
042	Theology IV – College Prep	<i>Gr. 12</i>	1 Credit

History of the Catholic Church – 1st Semester

This course helps students understand the Church's history from apostolic times to the present. The Church, founded by Christ, is sustained throughout history by the Holy Spirit. Students come to know that the Church is the living Body of Christ. It has both divine and human elements. The Church's 2,000 year history and how the Church has been guided by the successors of the Apostles are examined.

Responding to the Call of Jesus Christ – 2nd Semester

The purpose of this course is to help students understand the vocations of life: how Christ calls us to live. Married life, single life, priestly life and consecrated life are explored. Students reflect upon what it means to live life for the benefit of others and the value in considering a vocation in service to the Christian community.

ENGLISH DEPARTMENT

The English Department endorses the philosophy of SS. John Neumann and Maria Goretti High School. We hope that our course offerings will deepen the student's knowledge, will enable them to grow in self-confidence, and will enhance their development as well-informed, articulate, Christian individuals.

Following the *Archdiocesan Curriculum Guidelines for the Study of Language Arts and Literature*, we include the content areas of language, literature and composition, as well as the skill areas of reading, writing, speaking, listening, and vocabulary development. We try to foster in our students a love of reading which will enrich their lives and will serve as the best preparation for pre-college testing (PSAT, SAT, ACT). We reinforce our English curriculum by our use of the computer lab, where students learn word processing.

The goal of the English department is "to make students aware that language is basic to communication, and that writing and speaking are the devices one uses to convey ideas". We direct our students to see that "English should be a tool for the profit and use of the student, a source of improved communication with others, one way to enjoy leisure time, and at the same time to extend experiences beyond the physical limitations of one's own life setting. Literature is viewed as a record of human experiences, embodying the deepest values in life".

111 English Language Arts I – Honors Gr. 9 1 Credit

Pre-requisites: 7th and 8th grade Reading and Language Arts of 90+, Terra Nova (or equivalent) percentile of 90+, CSI of 120+, 8th grade teacher recommendation. A final average of 85+ is required for retention in the Honors Program.

112 English Language Arts I – College Prep Gr. 9 1 Credit

Critical Reading, Writing, and Speaking supported through Genre Studies

English Language Arts I is a required course for all ninth grade students. Based on the Common Core Standards, this course provides students with the skills and knowledge to become critical readers and writers by analyzing key ideas and details, craft and structure, and the integration of knowledge and ideas in literature and informational text.

Students will develop their writing skills by examining text types and purposes and by writing arguments, explanatory/informational texts, and narratives. Using the full writing process, students will learn how to produce and distribute quality writing using technology's capacity to produce, publish and share writing products. Students will conduct short research projects and will participate in a range of collaborative discussions integrating multiple sources of information. This course will advance students' knowledge of the conventions of Standard English and will strengthen vocabulary acquisition and use.

This course is supported through various literary Genre studies.

121 English Language Arts II – Honors Gr. 10 1 Credit

Pre-requisites: A final average of 85+ is required for retention in the Honors Program. A 93+ First Semester average, evidence of superior writing skills, and approval of Department Chair are required of any student seeking admission to the honors program who was not enrolled in English #111 in Freshman year.

122 English Language Arts II – College Prep Gr. 10 1 Credit

Critical Reading, Writing and Speaking supported through World and British Studies

English Language Arts II is a required course for all tenth grade students. Based on the Common Core Standards, this course provides students with the skills and knowledge to become advanced critical readers and writers by analyzing multiple themes, interpretations, and details, craft and structure, and the integration of knowledge and ideas in literature and informational text.

Reinforcing and expanding the writing objectives of the freshman year, this course will develop the student's writing skills by examining text types and purposes and by writing arguments to support claims in an analysis of substantive topics or texts. Students will write explanatory/informational texts to examine and convey complex ideas, and will write narratives to develop real or imagined experiences or events. Students will learn how to produce and distribute quality writing using technology's capacity to produce, publish, and share writing products. Students will conduct sustained research projects and will participate in a range of collaborative discussions and presentations integrating multiple sources of information. This course will further advance students' knowledge of the conventions of Standard English and will strengthen vocabulary acquisition and use.

This course is supported through various selections in World and British studies.

131 English Language Arts III – Honors Gr. 11 1 Credit

Pre-requisites: A final average of 85+ is required for retention in the Honors Program. A 95+ First Semester average, evidence of superior writing skills, and approval of Department Chair are required of any student seeking admission to the honors program who was not enrolled in English #121 in Sophomore year.

132 English Language Arts III – College Prep Gr. 11 1 Credit

Critical Reading, Writing and Speaking supported through American Studies

English Language Arts III is a required course for all tenth grade students. Based on the Common Core Standards, this course provides students with the skills and knowledge to become advanced critical readers and writers by analyzing key ideas and details, craft and structure, and the integration of knowledge and ideas in literature and informational text.

This course will develop the student's writing skills by examining text types and purposes and by writing arguments, explanatory/informational texts, and narratives. Students will learn how to produce and distribute quality writing using technology's capacity to produce, publish and share writing products. Students will conduct short research projects and will participate in a range of collaborative discussions integrating multiple sources of information. This course will advance students' knowledge of the conventions of Standard English and will strengthen vocabulary acquisition and use.

This course is supported through various selections in American studies.

- 135 **AP Language and Composition – Advanced Placement** *Gr. 11* **1 Credit**
 **This is an Online Course Only!*

Pre-requisite: A 90+ average in English #121 (First Semester). Recommendation by the 11th grade English teacher and an ability to work independently.

This course focuses intensely on the analysis of writing styles, both fiction and non-fiction. Students study principles of grammar, syntax, and rhetoric. Works of British and American authors are used exclusively. This course is the equivalent of the freshman year college English requirement. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

- 141 **English Language Arts IV – Honors** *Gr. 12* **1 Credit**

Pre-requisites: A final average of 85+ is required for retention in the Honors Program. A 95+ first semester average, evidence of superior writing skills, and the approval of the Department Chair are required of any student seeking admission to the Honors program who was not enrolled in English #131 in Junior year.

- 142 **English Language Arts IV – College Prep** *Gr. 12* **1 Credit**

Critical Reading, Writing and Speaking supported through contemporary American studies

English Language Arts III is a required course for all tenth grade students. Based on the Common Core Standards, this course provides students with the skills and knowledge to become advanced critical readers and writers by analyzing multiple themes, interpretations and details, craft and structure, and the integration of knowledge and ideas in literature and informational text.

Reinforcing and expanding the writing objectives of the junior year, this course will develop the student's writing skills by examining text types and purposes and by writing arguments to support claims in an analysis of substantive topics or texts. Students will write explanatory/informational texts to examine and convey complex ideas, and will write narratives to develop real or imagined experiences or events. Students will learn how to produce and distribute quality writing using technology's capacity to produce, publish and share writing products. Students will conduct sustained research projects and will participate in a range of collaborative discussions and presentations integrating multiple sources of information. This course will further advance students' knowledge of the conventions of Standard English and will strengthen vocabulary acquisition and use.

This course is supported through various selections in contemporary American studies.

- 145 **AP English Literature and Comp. - Advanced Placement** *Gr. 12* **1 Credit**

Pre-requisites: Recommendation by the 11th grade English teacher and an ability to work independently.

The Advanced Placement course involves the gifted student in a most intensive study of literature and its relevant application to serious and critical expository writing. The student learns customary modes of discourse, various rhetorical and writing devices, and the effective use of language in a clear, coherent, and persuasive way.

In this course the AP student must do careful readings of complex literature, develop critical standards for the independent appreciation of literature, and increase his/her sensitivity to literature as shared experience. Additionally, the student must develop writing skills that enable him/her to comment on and evaluate sophisticated readings similar to those found on the Advanced Placement English Examination. The student must also complete an independent research paper. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

NOTE: The summer assignment will count as the first major grade of the 1st quarter.

148 College Writing-Honors Gr. 11 or 12 1 Credit

This full year course focuses on college writing skills. Essays, Term papers, different research formats such as MLA and close reading and writing skills will be the focus. Students will write extensively in this course.

Pre-requisite: Recommendation of current English Teacher, approval of the Department Chairperson, a minimum of an 80 average in English

149 Our Cinema and Theater Heritage – Honors Gr. 12 1 Credit

This elective course allows the student to examine and to analyze selected films and plays and to participate in various improvisational activities. The approach to film and theater study includes a mixture of chronological and thematic information and methodology.

Assignments: A variety of essays, critiques, analyses, summaries, and performance projects including the writing and performing of a one-act play (first semester assessment) and the development of a cinema theater portfolio (second semester assessment).

150 Journalism I and II – Honors Gr. 11 or 12 1 Credit

This full year course is designed to introduce students to the field of journalism, including the history of reporting in the United States, vocabulary, research, basic forms of journalistic writing and editing as well as some aspects of newspaper production. Materials to be studied are journalism guidelines, handouts with writing and editing exercises developed by the author of this curriculum guide, and various newspapers and magazines, including the New York Times. Supplementary materials include posters, documentary film study, and psas. Additionally, students will assist in the designing, outlining, and production of the school yearbook (the crystal) and newspaper (the crown).

Pre-requisites: Recommendation of 10th/11th grade English teacher and interview with Journalism instructor prior to course selection.

Class size is limited.

SOCIAL STUDIES DEPARTMENT

Saints John Neumann and Maria Goretti Catholic High School's Social Studies Department has adopted a philosophy that has as its primary objective the total development of the whole student. Incorporating our Catholic values, we strive to prepare students to become active, intelligent citizens in our political democracy, and to aid in the development of those qualities which will enable them to assume productive roles in our diverse society. The members of the Social Studies Department recognize those factors that have contributed to the uniqueness of each individual, and provide students with a global outlook that will foster an appreciation for the achievements of all peoples.

All students are required to take three years of social studies. The required courses include World History, Government and Politics and Modern American History and Culture. It is strongly recommended that students take a fourth year of social studies if they intend to go on to college.

NOTE: Beginning with the Class of 2018, all students will be required to take **4 years** of Social Studies to graduate.

211	World History – Honors	Gr. 9	1 Credit
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Pre-requisites: 7th and 8th grade marks of 90+, Terra Nova Percentiles of 90+, CSI of 120+, and 8th grade teacher recommendation.

212	World History – College Prep	Gr. 9	1 Credit
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A history of major world civilizations designed to explore the development of the modern global community and the spread of ideologies and cultures. The curriculum employs transnational themes to provide connections which transcend time, space, and disciplines and which promote the use of the critical historical global and economic literacy skills to explore global patterns of change over time. Acquiring these skills will enable students to analyze and interpret historical events in depth and to apply their understanding to a variety of historical events.

215	AP World History – Advanced Placement <u>*This is an Online Course Only!</u>	Gr. 9	1 Credit
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Pre-requisites: Students will be selected based 7th and 8th grade marks of 90+, Terra Nova (or equivalent) percentiles of 90+, CSI of 120+, and 8th grade teacher and elementary school principal recommendation. Students also must have an ability to work independently. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

221	American Government and Politics - Honors	Gr. 10	1 Credit
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Pre-requisites: A final average of 85+ is required for retention in the Honors Program. A 95+ first semester average and the approval of the Department Chair are required of any student seeking admission to the Honors program who was not enrolled in World History #211 or #215 in Freshman year.

222	American Government and Politics – College Prep	Gr. 10	1 Credit
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This course is a comprehensive examinations of the supreme and fundamental characteristics of the American Government system. Its study involves the origins, development, principles, organization, powers, functions, and actual workings and processes of American Government. This course utilizes critical civil, economic, and historical literacy skills to emphasize political theory, philosophy, and the nature of the government and how it has impacted the country over time. This course is designed to give a thorough knowledge and deep understanding of the Government of the United States which is essential to all American citizens.

232 Modern U.S. History - College Prep Only Gr. 11 1 Credit

The first eight weeks of this course is designed to familiarize the student with the history and function of government in the United States. The course then pursues a study of United States history from post-Civil War period to the present 21st century. Integrated into the curriculum are the various techniques and skills needed to study history and social studies effectively.

235 AP United States History - Advanced Placement Gr. 11 1 Credit

Pre-requisites: Honors American Government & Politics and teacher recommendation; Students must have also demonstrated a high level of achievement in the last two years of Social Studies; parental approval

The Advanced Placement Program in United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by first-year introductory college courses. Students learn to assess historical materials—their relevance to a given interpretive problem, their reliability, and their importance—and to weigh the evidence and interpretations presented in historical scholarship. An Advanced Placement United States History course should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. This course requires extensive outside reading and writing assignments. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

NOTE: A student who fails to complete the summer assignment on the assigned dates will be dropped from the course automatically.

240 AP European History – Advanced Placement (Online) Gr. 12 1 Credit

AP European History focuses on developing students' abilities to think conceptually about European history from approximately 1450 to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance—Interaction of Europe and the World, Poverty and Prosperity, Objective Knowledge and Subjective Visions, States and Other Institutions of Power, and Individual and Society—provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

245 AP Government and Politics - Advanced Placement Gr. 12 1 Credit

The Advanced Placement Program in Government and Politics is designed to provide students with an analytical perspective on government and politics. Students will become familiar with various institutions, groups, beliefs and ideas that constitute U.S. politics. In addition, the Advanced Placement Program in Government and Politics prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by first-year introductory college courses.

Among the topics covered in this course are: political beliefs and behaviors, public policy, civil rights and civil liberties, political parties, interest groups and the mass media.

This course requires outside reading and writing assignments. **The taking of the AP exam is a requirement. (Exam Fee: approx. \$91.00)**

NOTE: a student who fails to complete the summer assignment on schedule will be dropped from the course automatically.

Pre-requisites: AP United States History and/or teacher recommendation and parental approval.

PLEASE NOTE: Students who have taken the AP United States History course have first preference.

250 AP Human Geography – Advanced Placement (Online) Gr. 11 or 12 1 Credit

The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012). **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

252 Psychology/Sociology - College Prep Only Gr. 11 or 12 1 Credit

In one semester, students will explore the foundation of psychology. Major topics will include methods, theories of learning and personality, child adolescent development and social psychology.

In the other semester, sociology students will explore such topics as deviance and social control, racial and ethnic relations, the family, gender, age and health issues and science and the mass media.

Pre-requisites: AP U.S. History or Modern U.S. History and teacher recommendation.

255 AP Psychology – Advanced Placement (Online) Gr. 11 or 12 1 Credit

The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

MATHEMATICS DEPARTMENT

Mathematics is required in grades 9, 10, 11 and strongly recommended in grade 12. Many colleges require a trigonometry component for admission. All senior level courses include trigonometry.

The goals of the Mathematics Department are as follows:

1. To foster a positive attitude toward mathematics
2. To meet the individual needs of the students by developing and challenging their capabilities; thereby preparing them for adult life
3. To provide every student the opportunity to develop mathematical competencies appropriate for them
4. To develop and strengthen skills of logic, accuracy, articulation, analysis and communication
5. To utilize data analysis, statistics and modeling to provide a concrete structure for everyday application of mathematics
6. To promote the development of each student's character by demanding an effort worthy of their ability and allowing them the freedom to attempt, experience and meet challenges
7. To contribute to the development of responsible leadership and a spirit of cooperation among students
8. To make students aware of the importance and moral responsibility in the use of global technology.

All courses require department approval.

A Texas-Instrument 84 Plus (TI-84 Plus) is required for track 1 and track 2 students. Tracks 3 and 4 may have either the TI-84 Plus or the TI-83 Plus. A calculator is required for all courses.

Track changes must be approved in consultation with the mathematics department chair person.

A summer review assignment is given to AP and track 1 students entering grades 10, 11 and 12. Satisfactory and prompt completion of the summer assignment is required to remain in the course.

311 Algebra 1 - Honors *Gr. 9* 1 Credit

This course includes the study of linear equations in one and two variables, matrices, functions, inequalities, graphing on a line and in a coordinate plane, quadratic equations, and rational and radical expressions. The text incorporates modeling and data analysis with an emphasis on theory. Topics with which the students are familiar are covered at an accelerated rate, allowing more time for advanced topics. Supplementary assignments are required to reinforce learned skills, enabling the teacher to better utilize instructional time. The course is designed to meet the needs of students who are motivated and mathematically talented.

Students will be invited to enter the Honors Mathematics Program based on their performance on the Neumann-Goretti placement test, their standardized test scores, and the recommendation of their middle school teacher. Students should be above average in the areas of critical thinking, basic mathematic skills, and work ethic. This program allows students to complete a full year's curriculum in two math disciplines, working toward taking AP courses in senior year.

312 Algebra I - College Prep *Gr. 9* 1 Credit

This course provides for the continued development of major ideas of algebra. It includes linear functions and conic sections with graphing, polynomial and rational algebraic expressions, irrational numbers and complex numbers, quadratic equations, systems and their graphs, exponents and logarithms, sequences, and series. An analytical and graphical approach is taken with an emphasis on problem solving and correlation. Supplementary assignments are required to reinforce learned skills, enabling the teacher to better utilize instructional time in the classroom. Graphing calculators are an integral part of the class work.

***Students are invited to Honors Algebra II on the recommendations of their Geometry and/or Algebra I teachers. They must have successfully passed Honors Algebra I and/or Honors Geometry with an average of 85 or higher. Completion of a summer assignment is mandatory.**

Pre-requisite: Honors Algebra 1, Honors Geometry

332 Algebra II - College Prep Gr. 11 1 Credit

Based on the Common Core Standards, students enrolled in Algebra II will interpret and build functions, will perform arithmetic with polynomials and rational functions, will analyze functions using various representations and will construct and compare linear and exponential models and solve problems. Students will reason abstractly and quantitatively, will construct viable arguments and critique reasoning of others and will use appropriate tools of mathematics strategically.

342 Precalculus - College Prep Gr. 11 or 12 1 Credit

The course is designed to prepare college-bound students for the rigor of post-secondary mathematics. It includes solving and graphing polynomial, rational, trigonometric, exponential and logarithmic functions, systems of quadratic equations, the radian measure of angles and polar coordinates, solving right triangles and verifying identities. Graphing calculators are an integral part of the class work.

Pre-requisites: Algebra I, Geometry, Algebra II

345 AP Calculus AB - Advanced Placement Gr. 11 or 12 1 Credit

This course adheres to the guidelines for the Calculus AB level and culminates in the student's taking the AB level Advanced Placement Calculus Exam for college credit in May. The course includes limits and continuity, differentiation, slope fields, maxima and minima, implicit differentiation and integration with applications. Supplementary assignments including Mathlete practice problems are required to reinforce learned skills, enabling the teacher to better utilize instructional time in the classroom. Graphing calculators are an integral part of the class work. **The taking of the AP exam is a requirement (Exam fee: approx. \$87.00).**

**Students are invited to take AP Calculus on the recommendation of their Honors Algebra II/Precalculus teacher and the successful completion of Honors Algebra II/Precalculus with an 85 or higher. Completion of a summer assignment may also be required.*

Pre-requisites: Honors Algebra II/Precalculus

350 AP Calculus BC – Advanced Placement (Online) Gr. 12 1 Credit

AP Calculus BC is roughly equivalent to both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support

conclusions. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

Pre-requisites: Students must have completed four years of secondary mathematics on the Honors level (Algebra I, Geometry, Algebra II, PreCalculus). Recommendation from the Math Department Chair and students must have a strong ability to work independently.

355 AP Statistics – Advanced Placement (Online) Gr. 11 or 12 1 Credit

The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

Pre-requisites: Honors Algebra II or Precalculus, Recommendation from the Math Department Chair and students must have a strong ability to work independently.

356 Statistics – Honors Gr. 12 1 Credit

This course is intended to be the first introduction to statistical analysis. The purpose of this course is to help students become acquainted with how to collect, interpret, and display information about varying sets of data. Real world applications will show students how statistics can improve decision making in a variety of business situations. Topics covered will be controlled experiments, descriptive statistics, normal distributions, sampling, correlation, and regression. Graphing calculators required.

Pre-requisites: Algebra 1, Geometry, Algebra 2, departmental approval and approval of the Assistant Principal for Academic Affairs

SCIENCE DEPARTMENT

The aim of science education at SS. John Neumann and Maria Goretti Catholic High School is to help each student arrive at the fullness of Christian life, by educating the whole student regardless of ability. To achieve this we cater to the physical, social, psychological, and moral needs of the students while instructing them in scientific principles and processes. The science faculty encourages students to take an active part in our scientifically and technologically advancing society while maintaining respect for life and the environment.

Three years of laboratory science are required for graduation. A fourth year is strongly recommended for students who go to college or who seek a medical or technical certificate. All students should investigate admissions policies of the colleges of their choice and should not be content with satisfying only the minimum course requirements, even if they do not intend to pursue a career in science.

411 Physical Science – Honors Gr. 9 1 Credit

This course introduces the student to the concepts of physics and chemistry. Subject matter includes the SI (metric) system of units & measurements, motion, force, work, energy, power, conservation laws, waves, heat, and light. Chemistry topics include atomic structure, atomic-molecular theory, stoichiometry, energy, chemical reactions, and nuclear chemistry.

Students will be invited to continue into Honors Biology based on their achievement in this course as well as percentile scoring on the Performance Series test. Performance in 9th grade mathematics is advisory to placement as well.

- 412 Physical Science – College Prep Gr. 9 1 Credit**
Physical science is an introductory course covering selected basic topics in chemistry and physics. Instruction on the following topics are covered, atomic structure, properties of elements, atomic-molecular chemistry, chemical reactions, energy, conservation laws, and nuclear chemistry.
- 421 Biology – Honors Gr. 10 1 Credit**
This course is a rigorous presentation of biological concepts including cellular biology, biochemistry, photosynthesis, and classification of living things and principles of genetics. Techniques of microscopy are pursued in appropriate laboratory exercises. Acceptance into this course is based on achievement grade physical science, as well as percentile scores in standardized tests. Performance in 9th grade mathematics is advisory to placement, as well.
- 422 Biology – College Prep Gr. 10 1 Credit**
This course is a survey of the structures and functions of living things. History of biological discovery, life processes, cell structure, plant and animal metabolism, taxonomy, genetics and evolution are some of the topics presented. Laboratory procedures complement the lecture topics and introduce students to the techniques of microscopy and data collection and evaluation.
- 431 Chemistry – Honors Gr. 11 1 Credit**
This course is for highly focused students who have shown exceptional ability in previous science courses. The conceptual framework of chemistry includes atomic structure, atomic-molecular theory, stoichiometry, energy, chemical reactions, nuclear chemistry and the value of chemistry to contemporary life. Admission into honors chemistry is based on achievement in 10th grade honors biology, as well as percentile scores in standardized tests. Achievement in 10th grade mathematics is also advisory.
Co-requisite: Honors Algebra II
Pre-requisites: Honors Physical Science and Honors Biology
- 432 Chemistry – College Prep Gr. 11 1 Credit**
This class is presented with a theory-based approach that will provide the student with a working knowledge of the principles of chemistry and scientific investigation. Topics for discussion will include atomic structure and theory, the periodic nature of atoms, chemical bonding and reactions, stoichiometry. The course promotes the use of deductive reasoning and laboratory skills.
Co-requisite: Algebra II
Pre-requisites: Physical Science and Biology
- 441 Physics - Honors Gr. 11 or 12 1 Credit**
This course presents a modern view of physics. Emphasis is made on the fundamental concepts underlying this basic science. The course investigates the concepts of motion, forces, mechanics, momentum, work, energy, heat, electrical circuits, waves, light, and the conservation laws.
Pre-requisite: Honors Pre-calculus and Honors Chemistry
- 446 Biology 2 (Anatomy & Physiology) – College Prep Gr. 11 or 12 1 Credit**
The aim of this course is to familiarize the student with areas of biology beyond the scope of Biology 1. Emphasis is placed on the study of anatomy and physiology. Lectures are accompanied by laboratory periods during which students develop microbiology and dissection skills.

Pre-requisite: Biology 1, Chemistry

450 AP Environ. Science – Advanced Placement (Online) Gr. 11 or 12 1 Credit

The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

Pre-requisite: Biology 1, Chemistry, and Algebra I

455 AP Biology – Advanced Placement (Online) Gr. 11 or 12 1 Credit

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes — energy and communication, genetics, information transfer, ecology, and interactions. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

LABORATORY REQUIREMENT - This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry based investigations that provide students with opportunities to apply the science practices.

Pre-requisite: Biology I, Chemistry

460 AP Chemistry – Advanced Placement (Online) Gr. 11 or 12 1 Credit

The AP Chemistry course provides students with a college-level foundation to support future advanced course work in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore topics such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

LABORATORY REQUIREMENT - This course requires that 25 percent of the instructional time provides students with opportunities to engage in laboratory investigations. This includes a minimum of 16 hands-on labs, at least six of which are inquiry based.

Pre-requisite: Algebra II, Chemistry

465 AP Physics I – Advanced Placement (Online) Gr. 11 or 12 1 Credit

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical

waves and sound; and introductory, simple circuits. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

LABORATORY REQUIREMENT - This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry based investigations that provide students with opportunities to apply the science practices.

Pre-requisite: Students should have completed Geometry and be concurrently taking Algebra II.

470 AP Physics II – Advanced Placement (Online) Gr. 12 1 Credit

AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

LABORATORY REQUIREMENT - This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry based investigations that provide students with opportunities to apply the science practices.

Pre-requisite: Students should have taken AP Physics 1. Students should also have taken or be concurrently taking precalculus.

WORLD LANGUAGE DEPARTMENT

The World Languages department aims to provide each student with unique opportunity to develop into a world citizen, sharing in the basic human ideals that are common to all peoples of the world despite language differences. Through language study, students build a bridge of understanding of the common bond shared by all people.

The World Language Department offers introductory and advanced courses in Spanish, Mandarin, Italian and Latin. In addition to learning the grammar and vocabulary necessary to communicate in a new language, students will also broaden their horizons by experiencing the traditions, value systems and histories of diverse cultures.

Language study offers many benefits to students, including the ability to communicate with a wider range of people, the ability to appreciate other cultures, and enhanced memorization and thinking skills. In addition, studying the commonalities between other languages and the English language leads to a greater proficiency in English expression, vocabulary and grammar.

Many colleges require successful language study either as a prerequisite to college entrance or as a requirement for graduation from their institution. Proficiency in another language is a tremendous asset in the areas of medicine, law, scientific research, foreign relations, trade, business, social services and special programs such as the Peace Corps.

NOTE: Any student wishing to continue in the same track for a 2nd, 3rd, or 4th year of a language must have departmental approval. Any student wishing to begin a second language must have approval from his/her current language teacher and the department chair. It is strongly recommended that all languages be taken in a minimum two-year sequence.

501 Latin I - Honors Gr. 9 1 Credit

This introduction to the Latin language has as its aim the immediate introduction of communication skills. The student will begin reading in Latin about a Roman family whose lives will be followed throughout the book. Through these stories not only will language be introduced but also an understanding of Roman lifestyles and custom's. Also importance is placed on using Latin to increase English vocabulary and building grammar skills. The study of Latin will also be used to facilitate the mastery of our modern language offerings.

502 Latin II - Honors Gr. 10 1 Credit

Latin 2 will continue to develop language skills in Latin and to apply these skills to English and our modern language offerings. The cultural legacy of the Romans will continue to be examined. As in Latin 1, communication in Latin is our main objective.

Pre-requisite: Teacher recommendation and a grade of at least 85 in Latin 1.

503 Latin III - Honors Gr. 11 or 12 1 Credit

Latin III will continue to develop language skills in Latin and to apply these skills to English and our modern language offerings. The cultural legacy of the Romans will continue to be examined. As in Latin I & II, communication in Latin is our main objective.

Pre-requisite: Teacher recommendation and a grade of at least 85 in Latin II.

521 Mandarin Chinese I – Honors Gr. 9, 10, or 11 1 Credit

This course is intended for students who would like to learn about the Chinese dialect or written Chinese. Mandarin Chinese is based on the Beijing dialect and is the national standard language of the People's Republic of China and the Republic of China (Taiwan). Students will develop practical language skills in listening, speaking, reading and writing in Mandarin Chinese and learn about Chinese culture and customs.

Students who satisfactorily complete Mandarin Chinese I are expected to take Mandarin Chinese II.

541 Italian I - Honors Gr. 9, 10, or 11 1 Credit

Italian I provides an introduction to elementary Italian structure presenting the spoken and phonetic skills, the written word and translations. This will be done through imitation, repetition and basic dialogues. The student will also be introduced to the richness of Italian culture through various presentations.

Students who satisfactorily complete Italian I are expected to take Italian II.

543 Italian II - Honors *Gr.10, 11, or 12* **1 Credit**

This course involves the reinforcement and expansion of the basic elements of grammar, vocabulary and idiomatic expression. Emphasis is made on the development of one's speaking ability and the implementation of grammar in oral responses. Cultural and literary highlights are also presented and discussed.

545 Italian III - Honors *Gr. 11 or 12* **1 Credit**

This course will provide an opportunity to utilize and expand on the knowledge and skills acquired in the first two years of the language. Further grammatical structures, vocabulary and verb tenses with continued application are paramount. Composition, question/answer practices, class recitation, reading comprehension and discussion of readings, as well as cultural information provide the means to achieve proficiency and mastery. Current videos, films computer laboratory, and the internet are used as often as possible to expose students to actual native speakers and current events in Italy.

547 AP Italian – Advanced Placement *Gr. 12* **1 Credit**

This course aims at providing a challenging and productive experience and allows the students to carry out all the functions that they have acquired in the first three years. The students will participate actively in oral and written forms. All the skills of reading, writing, listening and speaking are incorporated within a vigorous academic setting. Grammatical and verbal structures not completed in the 3rd year will be addressed. Literary, cultural and historical topics are supplemented with readings from various sources. Current videos, films computer laboratory, and the internet are used as often as possible to expose students to actual native speakers and current events in Italy. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**

561 Spanish I - Honors *Gr. 9, 10 or 11* **1 Credit**

Emphasis at this level is on pronunciation and the grammatical constructions of the language, which are presented in a natural way through dialogue and pattern practices, both written and spoken. The goal is to have each student become able to express him or herself fluently in the areas being studied. Students are also introduced to many of the cultural aspects of Latino culture. This goal is further enhanced by the use of varied technologies.

Students who satisfactorily complete Spanish I are expected to take Spanish II.

563 Spanish II - Honors *Gr.10, 11, or 12* **1 Credit**

Emphasis is placed on the continuation of vocabulary building, development of conversational skills, and reading comprehension on a more advanced and complex level. Hispanic culture is further highlighted, both through the thematic chapters of the text and outside resources.

Pre-requisite: 80 in Spanish 1, Track 1, and/or teacher recommendation
85 in Spanish 1, Track 2, and/or teacher recommendation

565 Spanish III - Honors *Gr.11 or 12* **1 Credit**

This course is a continuation of the proficiency-oriented levels presented in Spanish 1 and 2. Those areas which have been covered in the first two years are reviewed and expanded upon while new and more advanced concepts are presented. A more in-depth view of the entire Spanish-speaking world is presented, taking advantage of the many technologies at our disposal.

Pre-requisite: 85 in Spanish 2, Track 1, and/or teacher recommendation

90 in Spanish 2, Track 2, and/or teacher recommendation

567 Spanish IV - Honors

Gr. 12

1 Credit

This course further elaborates on what was presented in Spanish 3. The material learned in the first three years is reinforced through conversation, and creative rather than imitative writing. More complex readings and further use of technology will give the student an even deeper insight into the Spanish-speaking population of our world.

Pre-requisite: 90 in Spanish 3 and teacher recommendation

BUSINESS/TECHNOLOGY EDUCATION DEPARTMENT

The Business/Technology Education Program is designed to provide students with the skills, knowledge, attitude and Christian ethics necessary for the development of personal, vocational and economic competence. It is generally accepted that a student's education is not complete without some knowledge of business subjects, and a working use of computers.

Implementation of the MOS (Microsoft Office Specialist) certification program in the Business/Technology curriculum prepares students for a career in the business sector upon graduation. However, with selection of electives, the business student can meet college entrance requirements (the best of both areas, academic and business).

In addition to employment preparation, these courses develop valuable skills required by the college student for document preparation, reporting and research. The skills obtained in business/technology courses can provide the background and money to pay for college tuition as well.

612	Technological Communications I – College Prep	Gr. 9	0.5 Credits
	<p>In this semester long course, students will use technology as they demonstrate understanding of the basic computer protocols of their school. Students will develop effective communication skills in the use of electronic messaging technologies, will incorporate, identify, and demonstrate effective communication via the Internet. Students will use tools of the twenty-first century student to develop, publish, and collaborate on business, and research-based online documents and will develop presentations using online formats. Students will demonstrate understanding of MLA and APA formatting for research papers. Ethical practices with technology will be the focus of discussions.</p>		
632	Microsoft Office Specialist (MOS) – College Prep	Gr. 11 or 12	1 Credit
	<p>The MOS course consists of thorough training in each of the five programs included in the Microsoft Office Professional Suite: WORD, EXCEL, ACCESS, POWERPOINT, and OUTLOOK. This offering will prepare students for Microsoft certification in any or all of these areas.</p>		
635	Personal Finance – College Prep	Gr. 11 or 12	1 Credit
	<p>This course concentrates on skills that will enable students to make wise financial decisions in the future. It incorporates topics and concepts such as managing bank accounts, credit and debit cards, consumer purchasing, saving and investing, real estate and other investments, insurance and tax preparation. During the second half of the year, students will participate in a Virtual Business Simulation that lets them actually practice the key personal finance skills to succeed in life.</p>		
637	Accounting 1 – College Prep	Gr. 11 or 12	1 Credit
	<p>This course aims to provide the student with an exposure to and an understanding of the basic skills of accounting for a sole proprietorship, sales, manufacturing or merchandising business. It introduces terms that enable the student to have a better understanding of the economic and financial activities of the business world for both employment and personal use. The complete business cycle is taught through the use of lectures, problems and business simulations. Students will learn and utilize automated accounting software in the computer lab.</p>		
638	Accounting II - Honors	Gr. 12	1 Credit
	<p>This course is a continuation of Accounting 1. Topics include calculating inventory methods, calculating and analyzing depreciation, calculating interest income for Notes Receivable, accounting for long-term liabilities, stockholder's equity, analyzing financial statements, and statement of cash flows. In the second semester, students will learn and prepare personal income tax returns.</p>		
641	Honors Economics/ Business Law - Honors	Gr. 11 or 12	1 Credit
	<p>The aim of this course is to combine economic theory with the practical skills to begin a business career. Economics is a journey into finance, production, labor, government, and global systems. Business Law begins with an overview of the development of the American legal system. The course focuses on contractual obligations, the questions of how contracts arise and what are the requirements of a valid contract. Specifically, students will learn about employment, insurance and consumer contracts, including the purchasing of an automobile and a home.</p>		

- 645 Marketing – College Prep** *Gr. 11 or 12* **1 Credit**
- In this course, students are introduced to the industry of sports, entertainment, and event marketing. Students acquire transferable knowledge and skills among related industries for planning sports, entertainment, and event marketing. Topics included are branding, licensing, and naming rights; business foundations; concessions and on-site merchandising; economic foundations; human relations; and safety and security. Mathematics and social studies are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, and service learning.
- 647 Business Law/Business Management – College Prep** *Gr. 11 or 12* **1 Credit**
- Business Law begins with an overview of the development of the American legal system. The course focuses on contractual obligations; the questions of how contracts arise and what are the requirements of a valid contract. Specifically, the students will learn about employment, insurance and consumer contracts.
- Business Management instructs students to understand the purpose of business and the applicable technical knowledge. The study of leadership, decisiveness, empathy, flexibility, and results gives students the background to develop their competitive edge in today's global business environment.
- 644 iOS Programming – College Prep** *Gr. 12* **1 Credit**
- In this dynamic iOS Programming course you will learn how to create iPhone and iPad apps with guided instruction. You will get hands-on coding experience that will give you the skills and confidence to create your first iOS app or improve your existing apps. The course delves into an in-depth treatment of the iOS development environment and the iPhone SDK (software development kit) programming framework.
- *This a distance learning cours**
- 655 AP Microeconomics – Advanced Placement (Online)** *Gr. 11 or 12* **1 Credit**
- AP Microeconomics is an introductory college-level course that focuses on the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**
- Pre-requisite:*** There are no pre-requisites for AP Microeconomics. Students should be able to read a college-level textbook and should possess basic mathematics and graphing skills.
- 660 AP Macroeconomics – Advanced Placement (Online)** *Gr. 11 or 12* **1 Credit**
- AP Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. **All students are required to take the Advanced Placement test administered in May (Exam fee: approx. \$91.00).**
- Pre-requisite:*** There are no pre-requisites for AP Microeconomics. Students should be able to read a college-level textbook and should possess basic mathematics and graphing skills.

FINE ARTS DEPARTMENT

Fine Arts is an important and contributing factor in the total objectives of the SS. John Neumann and Maria Goretti High School curriculum. Enrollment in Fine Arts courses advances the academic and aesthetic development of the student. The formal study of music, art and dance gives the student the opportunity to enjoy a richer spiritual life, emphasizes the value of human living, and helps develop an understanding of a common bond shared by all peoples. Emphasis is placed on self-discipline and aesthetic sensitivity. Performing and visual arts courses enable the student to discover and develop creative potential, and contribute to a deeper love of our Creator, who is the source of all the arts.

For the serious performing and creative arts student, the Fine Arts Department offers four-year course sequences in Studio Art, Dance, and Music (both Band and String Orchestra instruments). Advanced courses (honors and advanced placement) enable the serious art student to engage in a deeper exploration of his or her individual and God-given creativity. The arts foster academic, aesthetic, technical and critical thinking skills necessary for growth, not only in the student's chosen discipline, but also in the school community and in life.

A Fine Arts course is a requirement for graduation. The requirement can be fulfilled by Arts Appreciation or one of the performing or creative arts courses.

712	Arts Appreciation – College Prep	Gr. 9	0.5 Credit
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Arts Appreciation is a one-semester freshman level mini-course, which traces the evolution of the Arts from earliest time to present day. The course is designed to awaken and enhance an appreciation of the arts. The artistic language is explored within a variety of styles, cultures and artistic media. The purpose of this course is to develop an understanding of a common bond shared by all peoples, as students become more deeply aware of the pervading power and influence of the arts in today's world. This is not a performing arts or creative arts course, but rather a survey of the history of the arts and their relevance in today's world.

Performing and Creative Arts Courses: Art; Instrumental

ART (Studio Art)

The studio art program is planned in a four-year studio sequence to provide developmental progress and continuity in the visual arts. Foundational and developmental instruction is offered for beginners as well as those with varying degrees of art background.

The art program is designed for the student who is serious about discovering and developing his/her creative abilities in the visual art. The first year stresses basic art elements, principles and techniques, and lays the foundation for expansion and development in subsequent years. A variety of media is presented to the student, as well as opportunities to grow in the use of imagination and critical judgment as the level of complexity increases. Slides, readings, computer presentations, field trips and visiting artists provide sources of enrichment from cultures past and present.

Emphasis is placed on self-discipline and aesthetic sensitivity, which will enrich the human spirit. It is the goal of the art program to contribute to the formation of mature students who see themselves as a participant in the creativity of God as they share in the creative process of art.

771	Studio Art 1- Foundations - Honors	Gr. 9, 10, 11, 12	1 Credit
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This course provides an introduction to the basic elements and principles of art. Since careful observation is a requisite for learning to render from models, value studies of basic forms provide a foundation for later color studies. A wide variety of traditional media is used, including pencil, charcoal, and watercolor. Computer technology is introduced.

Pre-requisite: Department approval; simple portfolio (two drawings, at least one of them must be drawn from direct observation)

772 Studio Art 2- Design 2D/3D - Honors Gr. 10, 11, 12 1 Credit

This Design course builds on the basic skills and concepts of Studio Art 1, but focuses on the elements of art and principles of design as they apply to two dimensional graphic design and three dimensional sculptural design. The first semester focuses on 2D Graphic design, how to make a flat surface communicate precisely, both in traditional media including pencil, charcoal, pastel, ink, painting, and printmaking and also in the art MAC CAD lab. MAC computer assisted drawing programs will be explored and utilized extensively as a means of introducing the student to the technology widely used in art and design careers. The second semester will introduce students to functional and sculptural aspects of three dimensional design in various media including clay.

Pre-requisites: Studio Art 1; departmental approval. Class size limited. Art 1 students with the highest homework grades will be given preference.

773 Studio Art 3 - Honors Gr. 11, 12 1 Credit

This course focuses on portfolio preparation. The serious student is provided with opportunity to develop a personal imagery and technical proficiency through exploration of a wide range of media including painting, printmaking, sculpture, and computer technology. The course begins with a review of concepts and skills from the first two years, and proceeds to emphasize the process of image making. The student is expected to carry out a variety of concepts and complete a presentable portfolio

Pre-requisite: Art 1 & 2; departmental approval

774 Studio Art 4 – Honors Gr. 12 1 Credit

Students reaching this level have developed drawing and design skills that will enable them to create individual projects based on possible career choices. Each student is challenged to use skills and knowledge of the language of art, and realize a personal sense of form and design. Advanced proficiency is expected at this level. Career options are researched and explored.

Pre-requisite: Art 1, 2 & 3; departmental approval

775 AP Studio Art - Advanced Placement Gr. 12 1 Credit

The AP course in art is an intense program of study, which culminates in a comprehensive portfolio following very specific guidelines. The portfolio will show breadth of imagery, style and media, as well as intense concentration in a specific theme. The student's AP exam for college credit includes both digital images and actual work produced in this course. **All students are required to take the Advanced Placement test (submit a portfolio) in May (Exam fee: approx. \$91.00).**

Pre-requisites: Art 1, 2 & 3; departmental approval

776 Ceramics I - Honors Gr. 11 1 Credit

This Studio Art course explores a broad range of techniques and approaches to art in the 3-D medium of ceramics. Students increase their knowledge of the elements of art and principles of design while learning studio techniques necessary for self-expression using clay. Areas of study include hand building, wheel throwing, surface decorating, glazing and kiln firing, as well as the history of ceramics from ancient times to contemporary styles, and the chemistry of clay and glazes. Emphasis is placed on self-discipline and aesthetic sensitivity while developing technical and critical thinking skills necessary for a studio practice in Ceramics. Recommended for Juniors and Seniors wishing to pursue a 3-D portfolio and as a pre-requisite for Advanced Placement 3-D Studio art.

Pre-requisite: Studio Art 1, 2 and Departmental Approval. Class size is limited to 12 students

INSTRUMENTAL MUSIC

The Instrumental Music program is designed to offer opportunities for all students to become actively involved in musical performance in the Band and/or String Orchestra. String, brass, woodwind and percussion instruments are provided for student use. Foundational and developmental instruction is offered for beginners as well as those with varying degrees of musical background. Small classes, individualized instruction, workshops and special performance opportunities enhance the learning experience. Emphasis is placed on self-discipline and aesthetic sensitivity, which enhance and enrich the human spirit. Advanced students are prepared for auditions in All Catholic performance groups (Band, Jazz Band and Orchestra.)

701 Instrumental Music I - Honors **Gr. 9, 10, 11, 12 1 Credit**

This course is designed for those who want to play a musical instrument. Its purpose is to foster creativity; to awaken and encourage an understanding and appreciation of music through performance. Prior experience is not necessary.

The student learns the basic techniques involved in playing a specific instrument. Instruction in the performance of string, woodwind, brass, and percussion instruments is given, as well as an introduction music theory and music history.

Students at this level may be invited into the Band.

702 Instrumental Music II – Honors **Gr. 10, 11, 12 1 Credit**

Students continue their study of instrumental performance, as well as music theory and music history. At this level, students may be admitted into the band.

Pre-requisite: Instrumental Music 1

703 Instrumental Music III - Honors **Gr. 11, 12 1 Credit**

Students reaching this level continue instrumental instruction, performance, music theory and music history

Pre-requisite: Instrumental Music 1 and 2

741 Orchestra I, II, III, IV - Honors **Gr. 9, 10, 11, 12 1 Credit**

This course is offered for the student who is interested in performing in the school orchestra as a part of their daily roster. Orchestra literature of various musical styles from different periods is studied and performed at the Christmas and Spring Concerts, as well as other functions. Membership in outside school music ensembles and All Catholic Band and Orchestra is encouraged as well.

Participation in scheduled performances is mandatory and weighs in the grade for this course.

Pre-requisite: Instrumental music 1 OR Music Director's approval.

PHYSICAL EDUCATION AND HEALTH DEPARTMENT

The Department of Health and Physical Education of SS. John Neumann and Maria Goretti High School vigorously recommends that all of our students develop the skills and practice the drills that are necessary to build a foundation of physical fitness. Our students will be provided the knowledge and practice necessary to develop and maintain a high level of fitness in each stage of life.

Physical Education combined with our Health Education classes place an emphasis on the choices that we make in everyday life that will allow our students to live long, prosperous lives.

911	Health (Boy's) – College Prep	<i>Gr. 9, 10, 11, 12</i>	0.5 Credit
912	Health (Girls) – College Prep	<i>Gr. 9, 10, 11, 12</i>	0.5 Credit

Health Education is a classroom discussion/lecture approach to addressing contemporary health issues, especially those relating to youth, such as tobacco, alcohol, and drug abuse, mental and emotional problems and basic hygiene topics. Areas such as basic human anatomy and physiology, exercise and rest, nutrition, and stress reduction are presented to promote the concept of prevention through the development of positive health practices. Diagnostic and computer technologies will be used to reinforce and enhance the learning experience.

921	Physical Education (Boy's) – College Prep	<i>Gr. 9, 10, 11, 12</i>	0.5 Credit
922	Physical Education (Girls) – College Prep	<i>Gr. 9, 10, 11, 12</i>	0.5 Credit

This is a comprehensive course incorporating instruction in the major sports skills, physical conditioning and skills and fitness testing. The student will fully participate in drills; games and activities designed to stimulate physical development and to promote teamwork, fair play, and friendly competition. In our technologically advanced society sedentary lifestyles have contributed to an increase in childhood obesity and the onset of traditional adult conditions such as hypertension and diabetes. It is our goal to provide our students with the opportunity to learn and experience the physical activities necessary to maintain and enhance a healthy lifestyle. In addition, the Wii lab is a regular part of the physical education experience.

930	Fundamentals of Dance – College Prep	<i>Gr. 9, 10, 11, 12</i>	0.5 Credit
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The content of the course will provide for the acquisition of both theoretical and experiential knowledge of dance as an art form. Students will become familiar with the fundamental vocabulary of dance, and various forms of body awareness through breathing, stretching, imagery, word and sound association. Students will identify and demonstrate steps and patterns from different dance styles/traditions and demonstrate the ability to remember extended movement sequences. **Note: This class can be used as a replacement for Gym but not Health.**

943	Kinesiology – College Prep	<i>Gr. 11, 12</i>	1 Credit
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Kinesiology is the study of human movement across a range of tasks including exercise, daily living, play, sport and work. It is our intention to promote an understanding of movement activities to enhance the physical and psychological health of our students.

Our students will also be made aware of the many employment opportunities in this field. The study of and interest in kinesiology can lead to a variety of careers involving services related to physical activity and fitness, health promotion, rehabilitation and sports medicine. Tradition has shown that our students thrive in these areas.

Topics such as cardiovascular exercise, physiology, muscle exercise physiology, biomechanics, disease prevention and exercise science will be discussed.

Note: Seniors will have preference being scheduled into this course. Juniors will be schedule if space permits.