

## **CAREER AND TECHNICAL EDUCATION**

### **Intro to Occupations**

*2 semesters – 1 credit*

This course is designed to help students develop transferable skills essential to all occupations, and to explore various career areas. The modules covered are: The Working Citizen, Personal Resource Management, Human Relations/Decision Making, and Introduction to the Economics of Work.

### **Computer Applications 10**

*1 semester – ½ credit*

The students will be introduced to the components of PC-based system running in the Windows operating system. This course is designed to introduce the student to a variety of computer applications within the Microsoft Office software suite including, MS word, MS Excel, MS Publisher, and MS PowerPoint. The final project will consist of a research-based project that will incorporate each component of the Microsoft Office suite covered in class. There will also be a formal question based assessment in addition to the final project.

### **Computer Applications 11**

*1 semester – ½ credit*

This course is designed to be a continuation of the Computer Applications 10 course, with a focus on multimedia and web page design. The course will culminate in a final project in which the students create a series of web pages and an online multimedia PowerPoint presentation used to showcase an oral presentation about a research topic. A formal question based assessment will also be given in addition to the final project.

### **Marketing**

*2 semesters – 1 credit*

Marketing is designed to expose the students to the activities that provide products and services for the satisfaction of consumer needs and wants. It also introduces the student to the basic marketing functions, activities and institutions, as well as provides them with an opportunity to develop the basic social, marketing and personal skills that are required for successful employability in marketing.

### **Entrepreneurship**

*2 semesters – 1 credit*

Students will learn how to start a simple small business by developing a business plan. They will explore economic basics, such as supply and demand, cost/benefit analysis, competitive advantage, and opportunity recognition. They will practice such business skills as preparing an income statement, keeping records, and negotiating. Further, students will learn about marketing, selling, customer service, and business communication, and will explore such topics as the source of profit, the production/distribution chain, human resources, and business technology.

## **ENGLISH**

*English courses require summer reading. Students will be held accountable for summer reading.*

### **English 9**

*2 semesters – 1 credit*

In this course, the writing process is explored, with an emphasis on grammar, spelling, usage and revision techniques. Through literature, students learn the elements of short stories, novels, drama and poetry, while enhancing their

analytical skills through their written and oral responses. Students participate in writing activities such as journal entries, letters, poems, descriptive essays, compositions and projects. All of these expectations are in accordance with the New York State Standards in Language Arts. Students are prepared for the writing tasks required for the New York State Comprehensive Regents Exam, administered in Grade 11.

### **English 10 and Honors**

*2 semesters – 1 credit*

Students will experience a broad range of international literature genres, such as the short story, modern and Shakespearean drama, poetry, non-fiction and the novel. While studying literature, students will develop their narrative, descriptive, expository, self-expressive and persuasive abilities through composition and oral assignments. Students will also be taught the skills necessary to produce a research paper. All of these expectations are in accordance with the New York State Standards in Language Arts. Students are prepared for the writing tasks required for the New York State Comprehensive Regents Exam, administered in Grade 11. In addition, listening, speaking, and reading skills, as mandated by New York State Standards, are applied to the curriculum. Students will also study grammar, sentence structure and vocabulary and the application of these to their writing. Teacher recommendation required for admission into English 10H program.

### **English 11**

*2 semesters – 1 credit*

Focusing on American literature, students continue to

develop their writing styles as they delve more deeply into the elements of genre and literary terms. They are prepared for the New York State mandated Comprehensive English Examination with extensive practice in each of the four writing components of the exam.

### **NU Writing 100 Writing and Thinking**

*1 semester – 3 NU credits  
½ NC credit*

This one-semester course on a variety of topics teaches writing as a means of acquiring, as well as expressing, ideas. Students examine essay components as a way of developing and refining their own ideas; they write multiple-draft summary, analysis, argument and research papers. They also learn how to avoid plagiarism. Students who choose to take this course for NU credit are responsible for a Niagara University course fee, as well as the purchase of all textbooks. Teacher recommendation required for admission into this course.

### **NU English 100 Introduction to Literature**

*1 semester – 3 NU credits  
½ NC credit*

Students will be encouraged to become lifelong readers through examining the basic structural, stylistic, and thematic elements that govern various genres and modes in literature. In reading, discussing, and presenting written analysis, students will continue to develop their abilities in presentation of self-interpretive conclusions. Students who choose to take this course for NU credit are responsible for a Niagara University course fee, as well as the purchase of all textbooks. Niagara University's guidelines, grading policy and final exam format will be used for this course. Teacher recommendation required for admission into this course.

### **British Literature (Gr. 12)**

*1 semester – ½ credit*

Students are exposed to selected English Literature from the Middle Ages through the Twentieth Century. While reviewing this spectrum of literature, students will be expected to produce a variety of composition assignments, including a college essay. Writing skills (spelling, grammar, vocabulary, usage) are evaluated as applied in student-produced work. Genres of literature may include drama, poetry and novels.

### **Film and Fiction (Gr. 12)**

*1 semester – 1/2/ credit*

This one-semester course will examine the artistic interpretations of classic and contemporary works of literature. Students will examine the filmmakers' treatments of selected texts for purposes of comparison and contrast to the original texts. Literary genres may include plays, short stories and novels.

### **NU Public Speaking 201**

*1 semester – 3 NU credits  
½ NC credit*

This one-semester course is directed to the beginning speech students, with the goal of helping them express themselves clearly, succinctly, and with some degree of persuasiveness. It is also intended to make students aware of the responsibilities engendered by the art of persuasion. The primary objective of this course is to help students sharpen their ability to converse, listen, and speak before a group, i.e., to communicate and to speak with confidence. This course adheres to the Niagara University Standards for writing, reading, speaking and listening in the Language Arts. Speeches will be for purposes of information, persuasion, special occasion, and oral interpretation. Students who choose to take this course for NU credit are responsible for a Niagara University course fee, as well as the purchase of all textbooks. Teacher recommendation required for admission into this course.

## **FINE ARTS**

### **Theater Arts**

*2 semesters – 1 credit*

This course is an introduction course to understanding the Arts of Theater and their application to daily life and to the enjoyment of theater as an art form.

### **Studio-In-Art**

*2 semesters – 1 credit*

In this course, four disciplines are incorporated: aesthetics, art criticism, art history, and studio experiences. Students will be exposed to a variety of artists and styles. They will experience a variety of studio techniques, using pencil, pastel, collage, printing, papermaking, clay, and pen and ink. This course is a pre-requisite for all other art courses.

### **Drawing**

*1 semester – ½ credit*

This course has two important objectives. It will increase the students' understanding and appreciation of drawings created by others. It will help students gain the knowledge, skills and confidence needed to improve their own drawing efforts. Students will experience a studio environment to learn a comprehensive approach in studying drawing, using charcoal, pencils, and pen and ink.

### **Painting**

*1 semester – ½ credit*

This is an advanced course for students who have completed Studio in Art. In the Painting course, emphasis will be on developing students' work through individual instruction. Discussions on form, composition, color and techniques will help students explore the expressive possibilities of the medium in which they are working.

### **Sculpture**

*1 semester – ½ credit*

Sculpture offers the student an outlet for self-expression in three-dimensional design. The course is designed to provide both aesthetic

and problem-solving experiences. Students will use such media as clay, paper Mache, plaster, cloth, and wax.

### **Graphic Design**

*1 semester – ½ credit*

This course will offer to students hands-on experiences in visual communication, using a variety of media such as color pencils, markers, and watercolors. Students' projects will consist of criteria for effective layouts in CD covers, advertisements, etc.

### **Pottery**

*1 semester – ½ credit*

This course consists of throwing on the wheel and hand building with clay. Students will learn to use different decorating techniques with glazes and engraving. Projects will consist of pots, plates, tiles, and three dimensional pieces.

### **Multi Media**

*1 semester – ½ credit*

This course will offer the students the experience to explore individual media which will allow them the opportunity to combine different media to create a variety of aesthetics in art.

## **FOREIGN LANGUAGE**

### **Spanish 1**

*2 semesters – 1 credit*

Students will be introduced to basic Spanish language skills with an emphasis on comprehension, correctness in speaking, basic grammatical structures, reading and writing skills. The course includes an introduction to Hispanic civilizations and culture.

### **Spanish 2**

*2 semesters – 1 credit*

Students will acquire intermediate Spanish language skills in order to further develop facility in listening comprehension, speaking, reading and writing. Students will continue the study of Hispanic civilizations and culture.

### **Spanish 3**

*2 semesters – 1 credit*

Spanish 3 expands and emphasizes the reading and writing skills acquired in Spanish 2. Grammatical and syntactical structures are systematically reviewed. Students are introduced to Spanish literature and are expected to further develop oral expression. *Students will take the New York State Regents Exam.*

### **NU Spanish 103 Intermediate Spanish**

*2 semesters – 3 NU credits*

*1 NC credit*

The main purpose of this course is to review and expand communication skills (speaking, listening, reading, writing) through materials reflecting the history, literature, and culture of the Hispanic world. There will be a Niagara University course fee. Students will be required to purchase all textbooks. Teacher recommendation required for admission into this course.

## **MATHEMATICS**

*Mathematics courses are offered on varied levels in each grade, according to the abilities that the students have demonstrated in previous Math classes. Students are assigned to the classes by teacher recommendation.*

### **Pre Calculus**

*2 semesters – 1 credit*

This course is recommended for students who will pursue college calculus, and for those who wish to strengthen their mathematical background. Topics to be covered are linear relations and functions, theory of equations, matrices, sequences and series, a review of trigonometry, polar coordinates and complex numbers, conics, and an introduction to limits, derivatives and integrals. A passing grade on the Algebra/Trig. Regents exam is a prerequisite for Pre Calculus.

### **NU Calculus**

*2 semesters – 4 NU credits*

*1 NC credit*

In this college-level course, the students will study the differential and integral calculus of functions. Topics covered will be the derivative and its applications, integration, techniques of integration, and applications of the definite integral. There will be a Niagara University course fee. Students will be required to purchase all required textbooks. Teacher recommendation required for admission into this course.

### **NU Calculus/NU Statistics**

*2 semesters – First semester NU Calculus as described above. Second semester NU Statistics described below and completed on NU campus*

*7 NU credits*

*1 NC credit*

A study of the basic terminology and methods of elementary statistics including organization of data, measures of central tendency and dispersion, sampling theory, estimation and testing of hypotheses. Also includes an introduction to correlation and linear regression.

### **Senior Math Topics**

*2 semesters – 1 credit*

Students who have studied Math 1, Math 2E and Math 3E over their first six semesters in high school will take this required fourth year of math. The class is recommended for seniors planning on a liberal arts program in college. Some topics included are advanced algebra, matrix theory, coordinate geometry, trigonometry, probability and statistics, as well as real-world applications such as consumer math. Use of computer and graphing calculator technology will be integrated into the course.

### **Integrated Algebra**

*2 semesters – 1 credit*

This course replaces Math A. It is the first of a 3-year sequence for Regents Math. Integrated Algebra will assist students in developing skills which will employ a variety of techniques for problem solving. Linear equations, quadratic

functions, coordinate geometry, and basic right triangle trigonometry will be explored. A Regents exam will be taken in June.

### **Geometry**

2 semesters – 1 credit

Geometry is a second year New York State Regents course. Students will investigate geometric relationships and justify these using reasoning and proofs. Transformations, properties of triangles, quadrilaterals, and circle geometry will be given attention. A June Regents exam will be administered

### **Algebra 2**

2 semesters – 1 credit

Algebra 2 is designed to be the 3<sup>rd</sup> year of math. The main emphasis will be on problem solving and algebraic concepts. Students will be expected to make connections between the verbal, numerical, algebraic, and geometric representations of problem situations. While developing the algebraic techniques that will be required of those students that continue their study of mathematics, this course is also intended to continue developing alternative solution strategies. This course is a continuation and extension of the two courses that preceded it.

### **Algebra 2 & Trigonometry**

2 semesters – 1 credit

This third year Math course is a continuation of Integrated Algebra and Geometry. Topics to be studied include: complex and imaginary nos., functions, logs, regressions, binomial expansions, and standard deviation. Right triangle trig will be expanded to include circular functions. The strengthening of algebraic techniques will be emphasized. A June Regents exam will be given at the conclusion of this course.

## **PHYSICAL EDUCATION/HEALTH**

### **Health**

1 semester – ½ credit

Our goal is to focus on the wellness of the individual and to foster responsible community involvement. The health curriculum stresses the importance of health issues to help and maintain the dignity of the students. The responsibility of the student to the community at large is enormous, as we foresee a population whose health choices have declined. Guest speakers are brought in to address issues such as drugs, AIDS, alcohol, nutrition, and eating disorders, organ and tissue donations, and cancer.

### **Co-ed Physical Education**

**9-10**

4 semesters – 1 credit

Study and mastery of the rules, history, skill development and strategies of various sports are the focus of the program. Included are softball, badminton, soccer, dance, volleyball, basketball, recreational games, and floor hockey. The fitness center will be used for activities involving conditioning and fitness. Each student will be required to fulfill the New York State Physical Fitness Test. The program is designed for weekly instruction with emphasis in grade 9 at the basic level and in grade 10 at the advanced level.

### **Co-ed Physical Education**

**11-12**

4 semesters – 1 credit

These courses give students an opportunity to attain a higher level of skill. Fundamentals of officiating and involvement of student officials in game situations are also part of the instruction. Emphasis is on participation, class tournaments and lifetime sports. Units will include volleyball, basketball, badminton, softball, aerobic conditioning, fitness and conditioning. Four years of Physical Education are required for a New York State high school diploma.

## **RELIGIOUS STUDIES**

*Our goal is to teach as Jesus taught, so the student may fully live and understand the baptismal, Christian character of being a praying and serving person in today's world. The religion curriculum goal is to nurture and develop confirmed and spiritually mature adults in the Church and local community.*

### **Religion 9**

2 semesters – 1 credit

This is the foundation course for the rest of the religious studies program. It provides an objective and comprehensive survey of Catholic Christianity. It covers such topics as identity and growth, culture and values, faith, a short history of Judaism, Jesus Christ, sacraments and morality.

### **Religion 10**

2 semesters – 1 credit

This course aims to help students read the Bible with understanding, and apply scriptural norms to daily life. It uses modern methods of scriptural interpretations to study the Pentateuch, Historical Books, Prophets, and Wisdom Literature. With the same approach, the books of the New Testament will be studied, especially the four Gospels. The second part of this course provides necessary information on sexuality and relationships from a Catholic Christian perspective. It helps students make personal decisions that lead to healthy, loving relationships.

### **Religion 11**

2 semesters – 1 credit

Religion 11 is a yearlong study of Christian morality. Fundamental concepts and principles, and the decision-making process of a Christian in today's world are covered. Topics include moral conviction, conscience, forgiveness, moral growth, euthanasia, eugenics, abortion, peace and justice issues such as war and poverty, and social justice issues involving race, sexuality and ecology.

### **Social Justice**

*1 semester – ½ credit*

This course provides students with an understanding of the Church's teaching on Social Justice issues. Seven key principles of Catholic Social teachings are addressed. Students learn to critique modern societal values in the light of Gospel values and to reflect on how to respond to these issues using principles of moral decision-making.

### **Lifestyles**

*1 semester – ½ credit*

This is a course designed for seniors. It covers the nature of love, growth in relationships, and the many factors leading up to marriage. It also studies the meaning of the Christian vocation to the single life, the married life, and the religious life. It includes practical matters such as communication, breaking up, staying married, and raising a family

### **Media and Religion**

*1 semester – ½ credit*

This course will help students become more "media literate." Material comes from movies, TV shows, videos, music, art, and literature. The class will provide tools for students to critically evaluate media images against our Christian values, to recognize what is or is not appropriate, to see what is there, is not there or should be there, and to learn to accept or reject the messages.

### **NU Religion 101 Introduction to Religion**

*1 semester – 3 NU credits*

*½ NC credit*

This course involves the study of the central aspects of Religion as exemplified in early religions, Hinduism, Buddhism, Judaism, Christianity and Islam. As part of its consideration of Christianity, the course highlights Catholic tradition, as well as the Vincentian heritage within it. In addition, it considers the contemporary critique of religion and issues of inter-religious dialogue. Teacher recommendation required for admission into this course.

### **NU Religion/NU Philosophy**

*2 semesters – 6 NU credits*

*1 NC credits*

First semester NU Religion as described above. Second semester NU Philosophy as described below: An introduction to the critical method of philosophy and the logic which lies at its base. This method is taught by studying some of the classic problems in philosophy and being exposed to several of the most important philosophers in history. Topics include: proofs of God, free will/determinism, problems of knowledge, metaphysics, personal identity, and the meaning of life.

### **SCIENCE**

#### **Living Environment**

*2 semesters – 1 credit*

This course provides students with an introduction to the basic concepts of biology, scientific inquiry and laboratory skills, with an emphasis on cell structure and function, homeostasis, similarities and differences among living organisms, genetics, reproduction, evolution and ecology. The course follows the New York State Regents curriculum. This course includes a state requirement of 1200 minutes of laboratory time. The final assessment in this course is the NYS Regents examination in Living Environment.

#### **PS/Earth Science**

*2 semesters – 1 credit*

Earth Science is a course designed to help students learn about the planet on which they live. Students will learn about the scientific processes that affect them in their daily lives. Generally, the sciences of physics, astronomy, meteorology, geology, oceanography, and seismology are covered. Students will see how these sciences help to explain what is happening in the earth's environment. Some topics include topography, erosion, weathering, earthquakes, volcanoes, rotation and revolution of the earth, pollution, and man's contribution to the environment. This course follows

the New York State Regents curriculum, including relevant laboratory exercises and exam. A laboratory performance exam is given as part of the Regents exam. Students must successfully complete 1200 minutes of laboratory experience in order to take the laboratory performance exam.

#### **PS/Chemistry**

*2 semesters – 1 credit*

This course provides the students with an introduction to the fundamental principles of chemistry. It is primarily intended for students who plan further studies in science, engineering, health or a related field. Laboratory investigations provide an opportunity to learn laboratory techniques and apply principles learned in the classroom. Students will study matter and energy, atomic structure, bonding, the periodic table, mathematics in chemistry, kinetics and equilibrium, acid-based theories, redox and electrochemistry, and organic chemistry. This course follows the New York State Regents curriculum. This course includes a state requirement of 1200 minutes of laboratory time. The final assessment in this course is the NYS Regents examination in PS/Chemistry.

#### **Forensic Science**

*2 semesters – 1 credit*

This course creatively integrates a series of investigative, high interest, hands-on activities into the science curriculum. Forensic science will help students better understand, apply and master scientific concepts. The lab activities emphasize the use of scientific inquiry as a way of thinking and problem solving while relating scientific processes to technological and societal issues. The course will feature the identification of unknowns as cooperative teams of students learn chemistry and physics techniques employed in forensic science. After completing techniques associated with a specific crime, students will play the role of forensic detectives, using their chemistry and physics

skills to assess their mastery of the concepts and forensic techniques they have learned. They will do this by being actively involved in collecting, analyzing, and interpreting evidence found at a crime scene.

### **Environmental Science**

*2 semesters – 1 credit*

This course includes an introduction to the ecological problems that the planet will face in this decade and beyond and possible conservation methods that might remedy them. Topics to be covered are ozone depletion, the greenhouse effect, rain forest destruction, the energy crisis, water pollution, and hazardous wastes and their disposal. Some laboratory experience is also included.

### **PS/Physics**

*2 semesters – 1 credit*

This course provides students with an introduction to the fundamental principles of physics, to form a foundation for future studies in science, engineering, technology, health, or a related field. Laboratory exercises will provide opportunity to apply principles learned in the classroom. Students will study mechanics, energy, electricity and magnetism, waves, and modern physics. The course follows the New York State Regents curriculum. This course includes a state requirement of 1200 minutes of laboratory time. The final assessment, the NYS Regents examination in PS/Physics, will be administered in June.

### **NU Biology**

*2 semesters – 3 NU credits*

*1 NC credit*

This is a study of basic functions of the human body and disease. This course is designed to increase the students' understanding of elementary human physiology. It will emphasize the functional aspects of the body at the cellular, organ and organ system levels. This course includes a laboratory and is designed for science majors with no prior college biology courses. There will

be a Niagara University course fee. Students will be required to purchase all textbooks. Teacher recommendation required for admission into this course.

## **SOCIAL STUDIES**

*The Board of Regents of the State of New York has mandated a four-year course of study for all high school students. The major purpose of this format is to instill in students a greater understanding of not only the history and society of their country but also of the histories and societies of the rest of the world, an understanding that is increasingly necessary in our complex and ever-changing world. The social studies department also offers several elective courses for those students who wish to pursue areas beyond the mandated courses*

### **Global History/Geography 1 & 2**

*4 semesters – 2 credits*

The global history course will be an in-depth study of the growth and development of the relationship between Western and non-Western civilizations. The ninth grade curriculum will begin with a study of prehistory and extend through the early modern world. The birth of the modern world through our present global concerns will be studied during tenth grade. Students will study geography and history, social, economic and political institutions and problems, in a global context. At the end of grade 10, students will be required to take and pass the New York State Regents Examination in Global History and Geography

### **U.S. History & Government**

*2 semesters – 1 credit*

The U.S. History & Government course will include an intensive study of the Constitution and its interpretations and applications to American History with the emphasis on events from 1865 to the present. Upon completion of this course, students will be required to pass the

Regents examination in U.S. History & Government.

### **Participation in Government**

*1 semester – ½ credit*

The government course will develop in students the skills necessary to actively and intelligently participate in the American democratic process. The course will include: introduction to public policy issues, decisions and problems; analyzing public policy issues and problems; making decisions; implementing the decision.

### **Economics**

*1 semester – ½ credit*

The economics course will give students an introduction to economic principles and a working knowledge of the American economic system. The course will include: introduction to economics and economic systems, microeconomics, macroeconomics, and the United States and the world economy.

### **NU History Americans in Post World War**

*1 semester – 3 NU credits*

*½ NC credit*

The course is an interpretive overview of developments critically affecting America and Americans during the turbulent years since World War II. It examines the nation's rise as a global superpower, the expanding role of central government, and related ideological, political, economic, social and cultural realities. It provides vivid perspectives on our present and future by evaluating the impact of these realities on fundamental American values and beliefs. Students are responsible for a Niagara University course fee, as well as the purchase of all textbooks. Teacher recommendation required for admission into this course.

### **Psychology**

*1 semester – ½ credit*

The Psychology course is an introduction to the basic elements of the science of human behavior. Topics of study will include the

nature of psychology, research methodology, basic and complex learning forms, the basic human memory system, motivation and emotion as behavioral factors, theories of personality, psychopathological behaviors and their treatment.

### **Sociology**

*1 semester – ½ credit*

The Sociology course is an introduction to the basic elements of the science of group behavior. Topics of study will include sociological methodology, elements of social life, culture, socialization, social groups and organizations, social patterns and institutions, social stratification, deviant behavior and social control, cultural and social change, and social problems.

### **Criminal Justice**

*1 semester – ½ credit*

This course is the study of law and law enforcement as related to adolescence. It is designed to meet the needs of our students by developing those skills which will enable them to become better citizens. The course will stress decision-making with an emphasis on moral reasoning and ethical analysis. Through the study of various topics, the students should gain a better understanding and more respect for the role, functions, and benefits that law enforcement has for society. The use of community resources will be an integral part of this program. Personnel representing the law enforcement agencies will be invited to the classroom to share their knowledge and experience.