



# TAMARAC HIGH SCHOOL

# CURRICULUM GUIDE



Tamarac High School  
Counseling Center  
2007-2008



BRUNSWICK CENTRAL SCHOOLS  
BRITTONKILL

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*Dear Students,*

*This curriculum guide is for you to use as a reference when deciding on your course of studies. As you will note, the high school offers you a wide range of course selections. We advise you to challenge yourself and take advantage of the many opportunities available to you at Tamarac High School.*

*Please involve your parents, teachers and your school counselors in these important decisions. Use this guide as a tool to make sure that you are meeting all requirements for a diploma in New York State.*

*It is our wish that your high school experience be fulfilling, challenging, rewarding and enjoyable.*

*The High School Counseling Center*

# **TAMARAC HIGH SCHOOL**

## **COUNSELORS**

Mrs. Patricia Maloney

Mrs. Marie Taglione

## **COUNSELING CENTER SERVICES**

### **1. PERSONAL:**

- Academic Counseling: Course selection and planning
- Encourage academic excellence and achievement
- Individual and group counseling
- Crisis intervention and referrals
- Liaison with parents, teachers and students
- Vocational and College Planning

### **2. INFORMATIONAL:**

- Career/College Planning/Reference Library
- Counseling Center Web Site
- Counseling Center Newsletter
- Exploring College and Careers Booklet
- The Road to College and Career Planning Booklet
- Student Resource Center
- Financial Aid Session
- Scholarship/ Financial Aid Resources
- Armed Services Day
- College Admissions Visitations
- College Caravan
- College Instant Admit Day
- Referrals to outside agencies and services

## HIGH SCHOOL GRADUATION REQUIREMENTS

## **EXTRA-CURRICULAR ACTIVITIES**

### **DIPLOMA REQUIREMENTS INCLUDE:**

1. Completion of the following specific minimum course requirements:

English .....	4 units
Social Studies .....	4 units
Mathematics .....	3 units
Science .....	3 units
Fine Art .....	1 unit
Foreign Language .....	2 units*
Health Education .....	1/2 unit
Physical Education (1/2 unit each year) .....	2 units

Course must be taken each semester while attending high school, per state guidelines.

\* Students must complete two years of seat time in a **Language Other Than English** (LOTE) by the end of 9th grade. They must also either pass the state LOTE proficiency exam by the end of 8th grade or pass a high school LOTE course.

2. Completion of a minimum of 22 units of credit.

### **3. ADDITIONAL TESTING REQUIREMENTS** **Successful completion of the following** **Regents Examinations:**

#### Regents Diploma

**Comprehensive English**  
**Mathematics A or**  
**Integrated Algebra**  
**I Regents Science**  
**Geometry**  
**Global History &**  
**Geography**  
**U.S. History &**  
**Government**

#### Regents Diploma

#### with Advanced Designation

**Comprehensive English**  
**Mathematics A**  
**Mathematics B or**  
**Integrated Algebra +**  
**Geometry + Algebra 2/Trig**  
**2 Regents Science**  
**Global History &**  
**Geography**  
**U.S. History**  
**& Government**  
**Foreign Language**

\* Students entering grade 9 prior to September 2005 and students with disabilities may earn a local diploma by completing credit requirements and receiving a grade of 55-64 on 5 required Regents Exams.

### **4. Academic Intervention Services (AIS)**

Students may be required to receive additional instruction that supplements regular classroom instruction or support services to address barriers to improve academic performance, as they are identified through various assessments.

### **5. Special Education**

While all students are required to meet the high school graduation requirements, some also need individualized supports to assist them in meeting these requirements. Whenever possible, these supports are provided within the regular education classes, but, at times, will be provided in stand alone classes that teach specific skills. Placement in stand alone special education classes is made through the Committee on Special Education.

Biology Club

Class Councils

Key Club

National Honor Society

Students Against Destructive Decisions

Student Senate

Yearbook (The Triumph)

Baseball - J.V., Varsity

Basketball - J.V. Varsity

Basketball - J.V., Varsity (Girls)

Cheerleaders - J.V., Varsity

Cross-Country - Coed

Football - J.V., Varsity

Soccer - J.V., Varsity (Girls and Boys)

Softball - J.V., Varsity (Girls)

Track - Coed

Volleyball - J.V., Varsity (Girls and Boys)

Wrestling - J.V., Varsity

If you are interested in participating in any of the above, see your orientation packet, watch the bulletin boards and listen to the morning announcements.

**Participation in extracurricular activities is a privilege. In order to participate in any extracurricular activity or interscholastic sports, Students are expected to pass all enrolled subjects during the previous and current ten week marking period. (BOE Policy 7.640)**



# **BUSINESS**



**BUSINESS LAW:** This course will concentrate on contracts and agreements, consumer protection laws, insurance, minors and employment laws. Issues involving criminal law, juvenile justice and the court system will also be discussed.

Grade Level: 10-12 (1/2 unit)

## **PERSONAL COMPUTER CONCEPTS & APPLICATIONS I:**

This course provides both a practical and conceptual background in microcomputer use. Students receive hands-on experience while learning the latest in graphical interface technology and how it interacts with Word Processing, Spreadsheets, Database Management, Presentation Graphics and the Internet. Microsoft Windows and Windows Applications are the software products used. Lab time outside of class may be required. Students in this course have the opportunity to earn 3 college credits from HVCC for a fee.

Grade Level: 10-12 (1/2 unit)

## **PERSONAL COMPUTER CONCEPTS & APPLICATIONS II:**

This course is a continuation of Personal Computer Concepts & Applications I. Students will use more advanced features of Word Processing, Spreadsheets, Database, Presentation Graphics and Internet applications. Lab time outside of class may be required. Students in the course have the opportunity to earn 3 college credits from HVCC for a fee.

Grade Level: 10-12 (1/2 unit)

**BUSINESS CONCEPTS & APPLICATIONS:** This course addresses the issues of business in the 21st century. Topics include Marketing, Finance, Management and Legal and Ethical issues. Students will learn the importance of professionalism in business. Students in this course have the opportunity to earn 3 college credits from HVCC for a fee.

Grade Level: 10-12 (1/2 Unit)

**BUSINESS COMMUNICATIONS:** This course addresses written, verbal and non-verbal communications applied in the business world. Design of business forms and graphic aids, resume preparation, listening skills, interview techniques and oral presentations will be reviewed. Students in this course have the opportunity to earn 3 college credits from HVCC for a fee.

Grade Level: 10-12 (1/2 Unit)

**PRINCIPLES OF MARKETING:** This course will discuss Marketing functions: Advertising, Transportation, Storage, Channels of Distribution, Pricing and Packaging. Types of middlemen and methods of buying, selling and pricing will be included. Students have the opportunity to earn 3 college credits from HVCC for a fee.

Grade Level: 11-12 (1/2 Unit)

**Desktop Publishing:** Using MS Publisher, the student will design and produce professional quality documents by using text, graphics, illustrations, and photos. With the use of the additional desktop publishing tools like design templates, graphic manipulation tools, color schemes, and wizards, the student will create, edit, and modify newsletters, brochures, merged documents, clip art, plus others. The student will learn to publish these documents to the Web. In addition, students will be introduced to Adobe Photoshop where they will do the retouching, resizing, cropping, and basic color correction of production work. Students in this course have the opportunity to earn 3 college credits from HVCC for a fee.

Grade Level: 10-12 (1/2 Unit)

**WEB PAGE DESIGN AND MANAGEMENT:** This course provides both a practical and conceptual introduction to the basic components of the World Wide Web, HTML and Web Page design. Students will create web pages while learning design and techniques for graphics and images. Lab time outside of class may be required. Students in this course have the opportunity to earn 3 college credits from HVCC for a fee.

Grade Level: 11-12 (1/2 Unit)



# ENGLISH

**ENGLISH 9 R:** A comprehensive study of all phases of the English language arts. The novel, short story, poetry, basic grammatical concepts, sentence structure, vocabulary development and spelling improvement will all be considered. Specific emphasis in each class will be subject to the needs of the students enrolled.

Honors Enrichment will be offered. (1 Unit)

**ENGLISH 10 R:** An in-depth study of American Literature concentrating on major American writers, the ideas they are expressing, and their relationship to trends in literature. Writing is stressed not only from a grammatical standpoint but also from a stylistic standpoint. Book analyses are assigned where major themes are examined.

Honors Enrichment will be offered. (1 Unit)

**ENGLISH 11 R:** Emphasis is placed on a study of the British Authors. A wide variety of materials including drama, essay, novel, poetry and short stories will be undertaken. Personal essay and book reviews in addition to an extensive study of vocabulary are standard requirements.

(1 Unit)

**CREATIVE WRITING:** This course stresses the enjoyment and satisfaction that can come from self-expression in writing. Each student will be given individual help in writing description, a personal narrative, a short story, poetry, and a one act play. Select this course if you like to learn by doing.

Grade Level: 12 (1/2 Unit)

**PUBLIC SPEAKING AND COMMUNICATIONS:** Students going to college, and even students going out into the business world should consider taking the course. The attempt of the course is to give **you** confidence and poise while speaking with others. Techniques such as eye contact, voice control, and mannerisms will be looked at. Topics chosen for speeches are not only interesting, but fun to work with. Situations will call for impromptu speeches, role playing, demonstration speeches and a personal experience speech. Techniques in drama will also be considered for the second part of the course. Students returning from college have mentioned the benefits from the course, due to the oral reports they have had to give in college so far. So take advantage of this course, and enjoy speaking in front of others. It can be fun.

Grade Level: 12 (1/2 Unit)

**MYTHOLOGY AND FOLKLORE:** This will be a survey course of short stories, plays, novels, and poetry in the mythology and folklore genres. A selection of authors might include: W.B. Yeats, Homer, T.H. White, Mark Twain, T.S. Eliot, James Joyce, and Anton Chekhov.

Grade Level: 12 (1/2 Unit)

**SHAKESPEARE:** This course focuses on understanding Shakespeare not as a genius but as an artist learning to perfect his craft. Methods include oral reading of the plays and discussion of videotaped performances. The first semester focuses on comedies about the relationship between men and women. The second semester adds tragedies and histories while shifting attention to the kingship and qualities of a leader. Writing assignments will be aimed at preparation for college level literary analysis. Students may opt to earn SUNYA University in the High School college credit. There is a fee for the college credit.

Grade Level: 12 (1/2 Unit)

**COLLEGE ENGLISH 121:** This course is designed for students who are willing to work hard in order to prepare themselves for the rigors of college English. Literature will be chosen from American, British and classical sources. Students will be introduced to methods of teaching and learning they can be expected to encounter in college English courses. The purpose of the course is to help bridge the gap between being a high school senior and a college freshman.

SUNYA College credit is available for this course. There is a fee for the college credit.

Grade Level: 12 (1 Unit)

**MYSTERY AND DETECTIVE FICTION:** Mystery and Detective Fiction is a half-year English elective that explores the rich history and dynamic nature of this literary genre. In addition to studying the origins of mystery writing, students will read short stories and novels covering the British and American traditions in the genre. The course will look at the role of the detective as an archetypal hero in both traditions. Students will also examine the diverse offerings of modern writers in one of the most popular and widely read literary forms in the world.

Grade Level: 12 (1/2 Unit)

**CHILDREN'S LITERATURE:** Have you ever wondered why some young children love books and some hate them? Whether and how they are read to, makes a big difference. This course is designed to help students prepare to help their own future children to learn to enjoy reading. Students will learn to decipher the meanings behind fairy tales and nursery rhymes, and to evaluate the quality of a variety of current books aimed at children 1 to 13 years of age. Students will practice effective oral reading and write their own stories for young children. A major research paper will be required.

Grade Level: 12 (1/2 Unit)

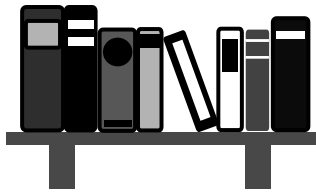
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## ENGLISH (Cont.)

**INDIVIDUALIZED READING:** This course is designed specifically for students who like to work independently. Students who choose this course should like to read. The course is designed so a student can work at his own pace, but deadlines are given. The course **contracts** work to the student for a numerical grade. A student then at his/her own pace fulfills the obligations of the contract. Students write papers and lead discussions about novels they have read.

Grade Level: 12

(1/2 Unit)



**Television Journalism:** This course will instruct students in both the TV production and journalism skills used in producing the news format through which most Americans receive information about the world around them. Students will write, videotape, edit, and produce a professional-level weekly television news magazine that will be the official news organ of the Tamarac community. Students in television journalism will be responsible for every facet of producing a quality news program: cover stories as reporters and videographers, gain experience before and behind the camera, and handle post-production editing duties in the control room. The course will provide students with an array of potentially marketable skills and a very solid foundation to pursue further education in the TV broadcast profession, journalism, or communications.

Grade Level: 12 - English Credit (1 Unit)

Grade Level: 11 - Elective Credit (1 Unit)

Prerequisite: Successful completion of TV Broadcast Media

## FOREIGN LANGUAGES

In order to receive a high school diploma, students must complete a minimum of two years of foreign language study, plus successfully complete the Proficiency examination. Tamarac offers sequences in three foreign languages: French, Spanish and Russian.

**SPANISH 2:** The second year of language study involves further development of the skills taught in level one. At this level, additional time is spent developing reading and writing skills. The final examination is the Spanish Proficiency exam.

Grade Level: 9-12

(1 Unit)

**SPANISH 3:** The third level course assures proficiency in comprehension, reading, speaking and writing Spanish. The final examination is the Spanish Regents examination.

Grade Level: 10-12

(1 Unit)

**SPANISH 4:** The fourth level course of advanced Spanish. Students will become acquainted with Spanish literature and history. Students will become proficient in oral and written Spanish. This course is available through SUNY for four college credits for a fee.

Grade Level: 11-12

(1 Unit)

**SPANISH 5:** The fifth level of advanced Spanish. Students will perfect their language skills through the study of Spanish on the college level. This course is available through SUNY for three college credits for a fee.

Grade Level: 12

(1 Unit)

**FRENCH 2:** The second year of study is designed to further develop each of the skills begun in level one and to promote a better understanding of the culture of the French people. The final examination is the French Proficiency examination.

Grade Level: 9-12

(1 Unit)

**FRENCH 3:** This course is conducted primarily in French and trains students to communicate ideas on a more advanced level in French. Weekly assignments include auditory and reading dialogs, reading comprehension passages and a written composition. Students are required to take the Regents examination in June.

Grade Level: 10-12

(1 Unit)

**FRENCH 4:** This is the advanced study of French. French literature will be introduced in the context of French history and civilization. There will also be a review of difficult grammar points. A great deal of oral work will be geared toward improving oral skills. This course is available through SUNY for four college credits for a fee.

Grade Level: 11-12

(1 Unit)

**FRENCH 5:** This is an advanced course in French language and literature. Students receive a deeper appreciation of French history and civilization, together with advanced grammar study and writing. This course is available through SUNY for four college credits for a fee.

Grade Level: 12

(1 Unit)

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## **FOREIGN LANGUAGES (Cont.)**

**RUSSIAN 1:** Students in the first year of Russian learn to read and write the Russian alphabet, study the basic structures of the Russian language and become familiar with the basic vocabulary of the Russian language. Cultural activities familiarize students with the life and culture of the Russian people.

Grade Level: 8-12 (1 Unit)

**RUSSIAN 2:** This is a continuation of first year Russian. The ability to communicate orally will be stressed. We will cover the major part of the grammar. The class will begin to write simple compositions. Our goal is to use Russian as actively as possible. The final examination is the Russian Proficiency examination.

Grade Level: 9-12 (1 Unit)

**RUSSIAN 3:** This course is the completion of a Regents sequence in Russian. Students will improve all their language skills in preparation for the Regents examination in June.

Grade Level: 10-12 (1 Unit)

**RUSSIAN 4:** This course concentrates on perfecting all language skills. Students will become acquainted with Russian literature, history and other aspects of Russian culture. Grammar will be reviewed and there will be regular writing assignments. This course is available through SUNY for five college credits for a fee.

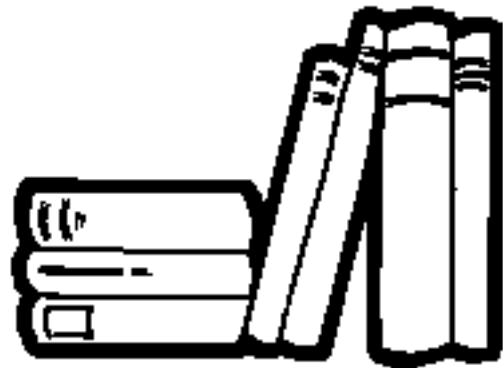
Grade Level: 11-12 (1 Unit)

**RUSSIAN 5:** This is an advanced course in Russian language and literature. Students receive a thorough preparation for advanced college-level Russian as well as a deeper appreciation of Russian literature and culture. This course is available through SUNY for five college credits for a fee.

Grade Level: 12 (1 Unit)

**LATIN ROOTS:** This is a half-year course aimed at improving vocabulary in English through a knowledge of Latin roots and prefixes. This course is recommended for those wishing to enrich their knowledge of English and to improve their performance on standardized verbal tests.

Grade Level: 11-12 1/2 unit



## **HEALTH EDUCATION**

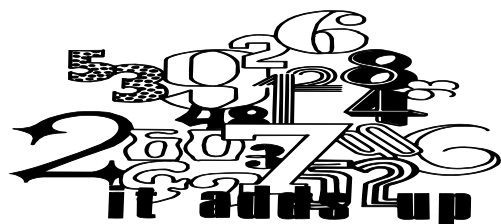
**HEALTH EDUCATION** is an intense study of physical, mental and social well-being. Emphasis will be placed on today's pertinent health concerns, such as values clarification, drug education and family life education. This is the required health curriculum for N.Y.S. graduation.

Grade Level: 11-12 (1/2 Unit)

## **HUMANITIES**

**INTRODUCTION TO PHILOSOPHY:** Philosophy is the love and pursuit of wisdom; a search for an understanding of values and reality in order to clarify one's attitude toward life. In this one semester course, students will explore the meaning of consciousness, truth, ethics, aesthetics and meaning itself. Students will learn of Plato, Descartes, Kant, Nietzsche, Sartre and John Dewey, compare them, and finally come up with a philosophy of their own.

Grade Level: 10-12 (1/2 Unit)



## MATHEMATICS

**INTEGRATED ALGEBRA:** This course replaces Math A. Topics include number sense, monomials and polynomials, irrational numbers, algebraic fractions, systems of equations, quadratics, triangles, coordinate geometry, functions, geometry, measurement, probability, and statistics. The Integrated Algebra Regents exam will be given in June.

Prerequisite: Recommendation of 8th grade teacher. (1 Unit)

Equipment needed: TI - 83 Plus or TI - 84 Plus Graphing Calculator

**MATH A2:** The second course in a two-year sequence to prepare students for the NYS requirements. Topics include rational expressions, right triangle trigonometry, coordinate geometry, transformational geometry, locus, quadratic-linear systems, probability and statistics. Students enrolled in Math A2 will take the Math A Regents exam in June.

Prerequisites: Math A and recommendation of Math A Teacher (1 Unit)

Equipment needed: TI-30X Scientific Calculator

**MATH AB:** The course continues the content covered in Math A. Topics include logic, math systems, Euclidean geometry, probability and some geometric constructions. The Math A Regents Exam will be given in January. At the start of the second semester topics from Math B will begin. These include Euclidean geometry proofs, coordinate geometry proofs, complex numbers and quadratics. A school final will be given in June.

Prerequisite: Math A and recommendation of Math A Teacher (1 Unit)

Equipment needed: TI-30X Scientific Calculator

**MATH ABX:** This is a full-year accelerated math course. The first semester completes the Math A sequence with the Math A exam given in January. Topics include functions and the coordinate plane, transformational geometry, locus, constructions and statistics. The second semester begins the Math B sequence. Topics included are complex numbers, composition of functions and exponents. A school final exam will be given in June.

Prerequisite: Successful completion of Math AX (1 Unit)

Equipment needed: TI-30X Scientific Calculator

**MATH 11:** This course is designed to give students an extra year of algebra and some exposure to trigonometry. Topics include quadratic equations, rational expressions, complex numbers, functions, statistics, conics, exponential and logarithmic functions. There will be a school final exam given in June

Prerequisite: Math A2 or Math AB (1 Unit)

**MATH B:** Replaces the traditional 11th year Advanced Algebra Trigonometry course. Topics include: real number system, quadratic equations, algebraic manipulation of rational expressions, radicals and complex numbers, functions, transformations including reflections, translations, rotations and isometrics, the geometry of the circle, trigonometry and trigonometric identities, exponents and logarithms, solution to oblique triangles, advanced probability and statistics. Optional topics will include polar coordinate geometry, matrix theory, mathematical induction and sequences and series work. The Math B exam will be taken in June.

Prerequisite: Math AB and an 85 on the Math A Exam (1 Unit)

Equipment needed: TI - 83 Plus or TI - 84 Plus Graphing Calculator

**MATH BX:** This is a full-year accelerated math course. The Math B exam will be given in June. Topics include direct and indirect proofs, functions, trigonometry, statistics and advanced algebra. Use of a graphing calculator is required.

Prerequisite: Math ABX (1 Unit)

Equipment needed: TI - 83 Plus or TI - 84 Plus Graphing Calculator

**MATH 12:** This is a senior level math course designed for students coming from Math 11. Topics include: probability, statistics, trigonometry and sequences and series. Time permitting, matrices will also be included. There will be a school final exam given in June.

Prerequisite: Math 11 (1 Unit)

**PRE-CALCULUS:** This course is a natural lead in to Calculus. This course will focus in on several types of functions including: quadratic, polynomial, inverse, exponential and logarithmic, circular, trigonometric. Also covered may include the study of vectors, matrices, sequences and series, advanced probability and an introduction to the study of calculus.

Prerequisite: Successful completion of the Regents Mathematics sequence with a recommended approximate overall average of "80" or above. An interest in mathematics above the norm is anticipated. (1 Unit)

Equipment needed: Scientific Calculator or TI - 83 Plus or TI - 84 Plus Graphing Calculator

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## MATHEMATICS (Cont.)

**PRE-CALCULUS X:** This course is a natural lead in to Calculus. This course will focus in on several types of functions including: quadratic, polynomial, inverse, exponential and logarithmic, circular, trigonometric. Also covered may include the study of vectors, matrices, sequences and series, and advanced probability. In addition, students will begin study of Calculus including Limits and Differentiation.

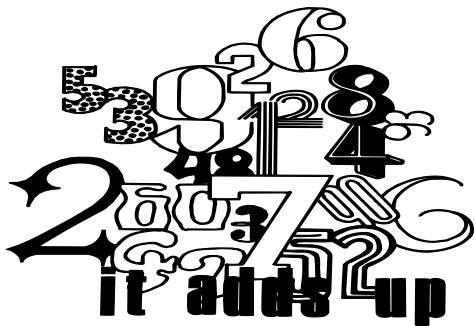
Prerequisite: Successful completion of (1 Unit)  
the Regents Mathematics sequence with a recommended approximate overall average of "80" or above. An interest in mathematics above the norm is anticipated.

Equipment needed: TI - 83 Plus or  
TI - 84 Plus Graphing Calculator

**CALCULUS:** A college level calculus course in which students will be eligible for SUNY credit upon successful completion of the course. This highly intense course includes the in depth study of functions, limits, derivatives, application of derivatives, integrals, application of integrals, transcendental functions. Each of these types will prove to be challenging and have direct impact on future collegiate success in mathematics and science studies. Highly self-motivated students are encouraged to take this course. There is a fee for students wishing to earn University in the High School credit.

Prerequisite - 85% or better in (1 Unit)  
Pre-Calculus X and/or teacher recommended

Equipment needed: TI - 83 Plus or  
TI - 84 Plus Graphing Calculator



## PERFORMING ARTS

**BAND:** The Tamarac High School Band is an award-winning Concert Band dedicated to the performance of quality literature and to the pursuit of teamwork, practice, and musical growth.

Band students will be exposed to a wide variety of band, solo, and ensemble literature through listening and performing. All band students are required to perform in concerts which will occur outside of the school day. These concerts are a goal of the performance curriculum and a major part of the band grade. All band students must take music lessons, either privately or in school as part of their grade and course of study. Lessons at school are part of the band schedule and occur once per week on a rotating basis throughout the students' daily schedule. Students who study privately may be waived from the school lesson commitment.

Prerequisite: Enrollment is open to all students who are proficient on a band instrument. Students new to the band program may join by audition with the instructor.

Grade Level: 9-12 (1 Unit)

**JAZZ ENSEMBLE:** This is a performing group open to instrumental music students interested in studying the jazz idiom. There will be a strong emphasis on jazz styles, theory, listening, and biographies of jazz musicians. Students will perform repertoire from the jazz genre with an emphasis on swing and big band music. Students are responsible for practicing on their own time as needed to successfully perform their individual parts in rehearsal. All band students are required to perform in concerts which will occur outside of the school day. These concerts are a goal of the performance curriculum and a major art of the band grade.

Prerequisite: Proficiency on their instrument and permission from the instructor.

Grade Level: 9-12 (1/2 Unit)

**CHORUS:** The emphasis in chorus is singing. The Choir gives several concerts during the year. The music performed includes examples from the standard choral repertoire as well as selections from musicals and the popular field. Students who are members of choir are given the opportunity to audition for NYSSMA sole festivals and All County Choirs.

Prerequisite: Participation in Middle School choir recommended, not required.

Grade Level: 9-12 (1 Unit)

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## **PERFORMING ARTS (Cont.)**

**CHORALAIRES:** The Choralaires is select mixed voice choral ensemble open to students in grades 9 - 12 by audition. The group performs intermediate to advanced level choral literature from various time periods in musical history. Along with vocal and rehearsal techniques, students will also explore the cultural and historical elements of choral music and apply these to their performances. The Choralaires perform at three regularly scheduled concerts: Senior Citizen's Concert, Winter Concert and Spring Concert. There are also other performances in the community as well as in-school events.

Grade Level: 9-12

(1 Unit)

**COMPREHENSIVE FOUNDATIONS OF MUSIC:** This course is designed to acquaint students with the basics of music. Emphasis is given to the following areas:

1. **Theory** - a study of the elements of music, including melody, rhythm chord structure and chord progressions.
2. **The Development of Music** - a study of the progress of music and musical practices from ancient times to the present, including popular music.

In addition, students will be given an opportunity to pursue individual interests including arranging, composition, performance and conducting.

Prerequisite: Instrumental lessons (including piano), participation in band and/or choir recommended, not required.

Grade Level: 10-12

(1/2 Unit)

**MUSIC APPRECIATION:** This is a non-performing music course. This coursework includes study of the American music years 1900 through current day while focusing on social and political events that helped shape the last 100 years of American music. Students will research and discuss cultural impacts on music and the musical influence on society.

Grade Level: 9-12

(1 Unit)



# **PHYSICAL EDUCATION**

Curriculum: The Tamarac Physical Education Department will provide a variety of activities that they feel will best meet the needs of each specific student, as well as incorporate the standards imposed by the State of New York. The units that we will participate in will mainly consist of lifetime activities, team sports and strength & aerobic exercise. Students will be divided up throughout the course of the year in several possible ways: competitive vs. non-competitive groupings and 9/10 & 11/12 groupings.

## **September**

Ultimate Frisbee or Tennis and Walking Wellness  
3 Weeks

## **October**

Flag Football or Speedball & Fitness Test  
3 Weeks

## **November**

Basketball or Floor Tennis  
3 Weeks

## **December**

Volleyball or Strength & Conditioning  
4 Weeks

## **January**

Badminton and Ping Pong  
4 Weeks

## **February**

Indoor Games or Team Handball or Snowshoes  
2 Weeks

## **March**

Floor Hockey or Aerobics or Weight Room  
4 Weeks

## **April**

Fitness Tests or Weight Room or Cardio Exercise  
2 Weeks

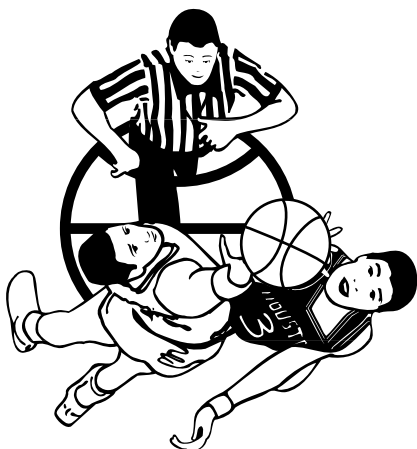
## **May**

Golf or Rugby or Field Hockey  
3 Weeks

## **June**

Softball and Walking Wellness & Tennis  
3 Weeks

**GRADING:** Students are graded daily on **participation, skill, effort, behavior & sportsmanship.**



# SCIENCE

**BIOLOGY R (THE LIVING ENVIRONMENT):** Students cover the standards studying: similarities and differences among living organisms, homeostasis in organisms, genetic continuity, reproduction and development, evolution, ecology, human impact on ecosystems, scientific inquiry and skills, and laboratory skills. A great deal of time is spent on reinforcing concepts with lab experiences. ALL labs done in class must be completed in order to take the Regents exam.

(1 Unit)

**EARTH SCIENCE (R):** Areas of study include: Physical geology, historical geology, astronomy, climatology, meteorology, and oceanography. This course challenges the student to use his reasoning ability to determine the logical order of events. There is a mandatory lab requirement in order to qualify for the Regents exam in Earth Science.

(1 Unit)

**CHEMISTRY (R)/PHYSICAL SETTING:** This course provides the theory behind the chemistry of the world around us while emphasizing practical applications where possible. The course relies on many visual examples in the form of media and live demonstrations. Topics include atomic structure, the periodic table, chemical bonding, reaction kinetics, mathematics in chemistry, organic and nuclear chemistry. There is a mandatory lab requirement in order to qualify for the Regents exam in Chemistry.

Prerequisites: Satisfactory completion of the Regents exams in Earth Science and Math A. (1 Unit)

**PHYSICS (R):** Topics include units in classical Newtonian Mechanics, Conservation of Energy, Electricity and Magnetism, Waves and Light, and Modern Physics. Additional topics not required by the New York State curriculum are also included. Student planning to take this course should be well grounded in the mathematical skills of Algebra and the Trigonometry of right triangles.

Prerequisites: Successful completion of Math A and currently enrolled in Math B or higher. (1 Unit)

**AP PHYSICS:** This course of study is based on the curriculum of the Advanced Placement Program of the College Board. The course material covered will prepare students to take both the New York State Regents exam in Physical Setting/Physics and the AP Physics (B) exam. Both exams are required for students taking this course. A fee is required for the AP exam. This course takes a deeper more rigorous approach to exploring the topics in physics than would be required in the Regents program. Students planning to take this course should have very strong mathematical skills.

Prerequisite: Completion of or currently enrolled in Pre-Calculus

(1 Unit)

**FORENSIC SCIENCE:** This course is designed to fulfill 1/2 credit of the 3 unit science requirement. Learn about the world of criminal investigations by studying forensics. This class will be heavily oriented toward hands on activities. Topics include but are not limited to document forgery, chromatography, soil analysis, blood drop analysis and typing, DNA Fingerprinting, hair and fiber analysis, and fingerprinting techniques.

Prerequisite: Successful completion of BOTH The Living Environment and Earth Science

Grade Level 11-12 (1/2 unit)

**PRINCIPLES OF SCIENCE FICTION:** This course explores how scientific principles are used through the media of literature, movies, and television. Selected works of science fiction will be reviewed in class with the emphasis on how the author is using scientific principles in her/his work, as well as what scientific principles are being stretched or just plain ignored in the work. Literature titles include *Caves of Steel* by Isaac Asimov, *The Ship Who Sang* by Anne McCaffrey, and *The Hitchhiker's Guide to the Galaxy* by Douglas Adams, and others. Movie titles include: *2001: A Space Odyssey*, *The Island*, *Serenity*, and others.

Students will be encouraged to do their own reading of titles provided by the teacher, as well as search out new titles and authors for their own enjoyment. Students will also be required to do writing assignments in the science fiction genre. Students who feel so motivated are encouraged to produce a short film in the science fiction genre as well.

Grade Level: 11-12 (1/2 Unit)

**TOPICS IN SCIENCE:** This is a course designed to fulfill 1/2 credit of the 3 unit Science requirement. Topics covered may include the Science of Foods, Consumer Products, the Environment and the Mechanics of Objects. The scientific principles of these topics will be explored with an emphasis on hands-on activities.

Grade Level: 11-12 (1/2 Unit)

**ADVANCED BIOLOGY:** This course is designed to give seniors additional background in the study of biology. The topics covered will provide the student with a solid foundation for success in a college level, introductory biology course. Topics will include ecology, ethology, biochemistry/enzymes, cell study, cellular respiration, photosynthesis, evolution, genetics, taxonomy, and the human immune system. Opportunities for exposure to and discussion of current scientific research, and "hands on" authentic inquiry and experimentation will be offered and encouraged.

Prerequisite: Successful completion of BOTH Biology and Chemistry

Grade Level: 12 (1 unit)

(Continued on following page)

## SCIENCE (Cont.)

**ANATOMY AND PHYSIOLOGY:** Students will study in detail human anatomy and physiology. Specifically, students will study all human systems as they relate to form and function. Some dissections (cat or fetal pig) will be completed. In addition to wet lab activities, students will participate in computer simulations of programs related to the topic of human systems. It is anticipated that this course will be valuable to students planning on studying Pre-Medical, Pre-Dental, Pre-Veterinarian, or other biological sciences in the future.

Prerequisite: Successful completion of Physics or AP Physics

Grade Level: 12 (1 Unit)



## SOCIAL STUDIES

**GLOBAL HISTORY IR and IIR:** This is a two year course that is designed to introduce students to world history using a chronological approach. The ninth grade course covers all 5 social studies standards and 11 themes in exploring world events from the ancient times to the Renaissance.

The tenth grade course picks up with the Renaissance and continues to modern times. This course stresses global connections and interactions as students develop an understanding of the scope and sequence of world history.

Reading, writing and thinking skills are stressed throughout both years. The Regents exam is administered at the end of Global History II and serves as the final exam for Global History II.

Honors enrichment will be offered.

Grade Level: 9-10 (1 Unit each year)

**U.S. HISTORY AND GOVERNMENT R:** This will be a history of the U.S. and will cover a chronological survey of U.S. History, in general. The emphasis will be on the U.S. as a developing industrial and post-industrial nation. Constitutional and legal issues will be explored in depth, as will the problems of a dynamic industrial society in an increasingly complex and technologically-oriented world. Previous historical knowledge will be called upon for background, comparison, and contrast purposes in all topics.

Grade Level: 11 (1 Unit)

**ADVANCED PLACEMENT AMERICAN HISTORY:** This AP course is a very intensive, in-depth study of American History from 1607 to the present. It places heavy emphasis on historiography, that is on the methods and interpretations that various historians have used in their unlocking of the American past. This course will encourage a student to think in historical rather than just contemporary terms. It requires both extensive reading and the ability to reason in abstract terms. The instruction is considered to be equivalent of undergraduate college level. The Regents exam as well as the Advanced Placement examination is required of all students taking this course. An examination fee is required. Summer reading will be required.

Prerequisite: Recommended by Grade 10 Social Studies teacher.

Grade Level: 11 (1 Unit)

**ECONOMICS:** This course will include the basic economic concepts and understandings which all persons will need to function effectively and intelligently as citizens and participants in the economy of the United States and of the world.

Grade Level: 12 (1/2 Unit)

**PARTICIPATION IN GOVERNMENT:** This course will emphasize the interaction between citizens and governments at all levels, local, state, and federal. The course will encourage students to understand and participate in the democratic process.

Grade Level: 12 (1/2 Unit)

**PSYCHOLOGY:** A survey of the basic processes which underlie human psychological development. Emphasis will be placed on the uses of psychological testing, processes of perception, learning child development, motivation, and normal and abnormal behavior. Students have the opportunity to earn 3 college credits from HVCC for a fee.

Grade Level: 12 (1/2 Unit)

**SOCIOLOGY:** An explanation of the nature and scope of sociology, together with a study of the nature of society, culture, and human groups. Emphasis is also given to the basic processes of social interaction and to the major social institutions. Students have the opportunity to earn 3 college credits from HVCC for a fee.

Grade Level: 12 (1/2 Unit)

## SPECIAL EDUCATION

**RESOURCE ROOM:** The Resource Room program provides students instruction that supplements regular education classes. Curriculum focuses primarily on pre-teaching and reteaching specific skills and concepts taught in English, Math, Science, and Social Studies.

Prerequisite: CSE Recommendation (1/2 Unit)

**STUDY SKILLS:** The Study Skills program teaches students strategies and techniques that increase their independence in meeting the requirements of the regular education curriculum. Units of study include such topics as time management, organizational skills, test taking strategies and studying strategies. Students learn about individual learning styles and are instructed in methods of improving reading and listening. Students are given the opportunity during class to apply skills and strategies to assignments given in other classes.

Prerequisite: CSE Recommendation (1/2 Unit)

**WRITING LAB:** This course is intended to support those students with significant weaknesses in written expression and writing mechanics. It is specifically designed to help students meet the NYS English/Language Arts Standards: writing for information and understanding; literary response and expression; critical analysis and evaluation; and social interaction. Units of study include document based questions (DBQs), sentence structure, proofreading, spelling, graphic organizers, journal writing and research papers. Students are given the opportunity during class to apply skills taught to completing assignments given in Social Studies and English classes.

Prerequisite: CSE Recommendation 1/2 Unit)

**READING IN THE CONTENT AREA:** This course is designed to help students improve reading comprehension skills, reading fluency and vocabulary. It uses a content-based curriculum, drawing from Social Studies and Science courses the students are currently enrolled in.

Prerequisite: CSE Recommendation (1/2 Unit)



• **Course offerings and descriptions may vary according to resources available.** •

## TECHNOLOGY EDUCATION

**DESIGN & DRAWING:** The student will be introduced to the fundamentals of mechanical and architectural design and drawing. This course fulfills the one unit art or music graduation requirement.

Grade Level: 9-12 (1 Unit)

**AUTOCAD:** Students will learn to use computer aided drafting programs to construct 2-d and 3-d objects. This course may be taken for college credit through HVCC for a fee.

Prerequisites: Student must have successfully completed Math A and be enrolled in Math B.

Grade Level 10-12  
(1 Unit)

**TV AND BROADCAST MEDIA:** This course is designed to increase the students awareness of audiovisual systems through manipulative experiences with equipment and materials associated with communication systems. As the student progresses through this module, they will learn the basics of video production: camera operation, audio equipment, lights, ancillary equipment and program production from script writing and studio work to edition.

Students will gather historic perspective on the history and evolution of American filmmaking and in turn use this to write, produce and direct short pieces of their own that will exemplify various genres of the media. Students in this course have the opportunity to receive 3 college credits through HVCC for a fee.

Grade Level 10-12 (1 Unit)

**ADVANCED MEDIA PRODUCTION:** Advanced Media Production is built upon the foundations laid out in TV and Broadcast Media. Students will take the basic concepts learned in the beginning course and expand upon them both with the equipment available and creatively. Problem solving exercises ranging from claymation to music videos will be tackled and learned from. The integration of computers and computer software into video presentations will also be addressed.

Prerequisite: TV and Broadcast Media (1 Unit)





## VISUAL ARTS

**STUDIO IN ART:** This is a comprehensive course in the study of art. Included in the curriculum is an exploration of the various art mediums, such as painting, pen and ink, drawing and 3-d modeling. Historical and contemporary works of art are also studied and analyzed. Computer aided projects will be done throughout the year. This course is a prerequisite for advanced Art courses and fulfills the one unit art/music credit required for graduation.

Grade Level: 9-12 (1 Unit)

**DRAWING:** This course will cover the use of many drawing media such as pencil, charcoal, pastels, pen and ink, scratchboard, crayon and others available. Drawing emphasis will be placed on techniques of accomplished artists in the drawing of still-life, cartoons, figure drawings, landscapes, seascapes, and general design.

Prerequisite: Studio in Art  
Grade Level: 9-12 (1/2 Unit)

**PAINTING:** Painting media acrylics, watercolor, pen and ink wash, will be utilized. Subjects covered will be general color theory with examples from the old masters, landscape painting, abstract painting and others as time permits.

Prerequisite: Studio in Art  
Grade Level: 9-12 (1/2 Unit)

**DIGITAL PHOTOGRAPHY:** Students in this course will learn to create, process and manipulate photos using digital cameras, scanners and photo editing programs. All projects in this course will be done with the use of the computer. This is an advanced art course that requires a good foundation in the elements of design such as line, color, shape, proportion, scale and texture, as well as composition, value, intensity, and balance. Students enrolled in this course need to own or have access to a digital camera. The purchase of a USB jump/travel drive is recommended as student file size is limited.

Prerequisite: Studio in Art  
Grade Level: 9-12 (1 unit)



**INDEPENDENT STUDY IN ART:** In order for students to qualify for Independent Study in Art, he or she must have an "A" in at least one high school art course other than Studio in Art. Also, the student must work out a contract program based upon a mutual (written) agreement by teacher and student concerning the kind, scope, and amount of work to be completed or researched. Finally approval must be obtained from the Counseling Center and parent. Also, the fundamentals course for the Independent Study must have been completed.

Prerequisite: Studio in Art and one advanced art course with an "A" & approval of Art teacher.  
Grade Level: 11-12 (1 Unit)

**ADVANCED PHOTOGRAPHY:** An advanced art course for students interested in photography. Students will learn scanning and basic Photoshop techniques in order to manipulate and improve images using the computer.

Prerequisite: Studio In Art, Photography.  
Students should have their own digital camera.  
Grade Level: 11-12 (1 Unit)

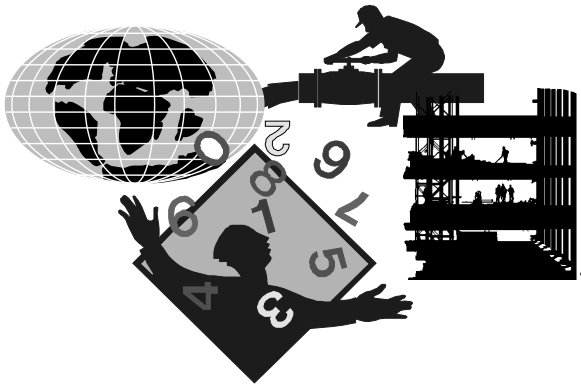


# VOCATIONAL EDUCATION

Vocational Education programs are designed to provide high school students with entry level job skills, basic skills related to a particular employment field, and/or an opportunity to explore a variety of occupational fields prior to making a career choice. The development of suitable work habits and attitudes is stressed in each course with his or her abilities and interests.

Students enrolled in Vocational Education programs spend a half-day at their home school taking required academic courses and the other half-day at the occupational center taking the occupational course of their choice. A maximum of four high school credits may be earned for each year of successful completion of an occupational course.

A low student to teacher ratio is required in occupational education courses due to the necessity for individualized instruction, and the need for close supervision during field and/or on-the-job training experience. Much of the equipment utilized in occupational education programs is highly sophisticated and potentially dangerous. During lab work time, students are employed in a much larger area than the conventional classrooms.



## VO-TEC PROGRAMS

The following VO-TEC courses are available at Questar III, Rensselaer Education Center. All courses are for 11th and 12th grade students. Students can earn 4 credits per year towards their high school diploma and be awarded a vocational certificate upon successfully completing their course.

- Academy for Information Technology I & II
- Automotive Technology I & II
- Collision Technology I & II
- Construction Technology I & II
- Cooperative Education
- Cosmetology/Advanced Cosmetology
- Criminal Justice I & II
- Culinary Arts I & II
- Early Childhood Education I & II
- Heating, Ventilation, Air Conditioning and Refrigeration I & II
- LPN I & II
- Special Needs
- Certified Nurse Assistant I. II

### \*Questar III/New Visions

- Math, Engineering, Technology & Science
- Scientific Research and World Health
- Visual and Performing Arts

### \*Capital Region/New Visions

- Health Careers
- Human Services & Special Education
- Public Communications
- Law & Government

**\*New Visions Programs are available for seniors only.**