





# Cranston High School West

## Program of Studies : Electives – Grade 9

### MATHEMATICS DEPARTMENT

**345M INTRODUCTORY STATISTICS** Term: FY Grade: 9-11 PBGR: 0.5 Mathematics  
Prerequisite: Algebra I (co-requisite) or Teacher Recommendation

This course will introduce students to basic concepts of Statistics and Probability such as measures of central tendency, dispersion, quartiles, regression lines, experimental and theoretical probability, and counting methods. Students will apply and reinforce the concepts of the course with technology ie. spreadsheet software and graphing calculators. Students will engage in data collection for the purpose of statistical study and experimentation to verify probability theory.

**371 PROGRAMMING/VISUAL BASIC HONORS** Term: FY Grade: 9-12 PBGR: 1.0 Math Related  
Prerequisite: Algebra I or teacher recommendation OR PBGR: 1.0 Technology

This honors level course is a rigorous introduction to good programming style and problem solving strategies. The areas of emphasis are the components of the computer, computer logic, flow charting, writing programs in the BASIC language, and writing BASIC programs and VISUAL BASIC programs. Mathematical, scientific, and additional applications will be assigned as programs. Lab time will be available for projects.

### SCIENCE DEPARTMENT

**466M ASTRONOMY** Term: FY Grade 9-11 PBGR: 0.5 Science  
Prerequisite: none

This course will focus on the earth's role in our solar system and the skills needed to make astronomical observations. Students will also study the strange phenomena existing outside our solar system.

### BUSINESS DEPARTMENT

**500M THE DYNAMICS OF BUSINESS** Term: FY Grade: 9-12 PBGR: 0.5 Elective  
Prerequisite: None

This course introduces the exciting and challenging world of business. Some of the topics included are marketing, the economy, technology, accounting principles, management and leadership skills required to become successful in the business world. Students will engage in an entrepreneurial unit to enhance an understanding of owning their own business. Furthermore, students will partake in a stock market trade competition and a group project in one of the business components of their choice

Our goal is to prepare students to become knowledgeable and ethical decision makers as they fulfill their roles as consumers, workers, and citizens. The mission of the class is to ensure that students are afforded equal access to fundamental business knowledge and skills and therefore, an equal opportunity for success in life.

Throughout the course, students will have the opportunity to develop and demonstrate proficiency in critical thinking, problem solving, and communication skills that will lead to an opportunity to create an artifact to include in their digital portfolio demonstrating these skills.

**521M COMPUTER LITERACY** Term: FY Grade: 9-12 PBGR: 0.5 Technology  
Prerequisite: None

This course is designed to bring students to a level of computer proficiency under state and local curriculum guidelines. Students will be introduced to the Windows operating environment and MS Office, including Word, Excel, Access, and PowerPoint. Upon successful completion of this course, students will have a foundation of skill in document processing, spreadsheets and charts, database management, and multimedia presentations.

**524 COMPUTER LITERACY/SUPERWRITE** Term: FY Grade: 9-12 PBGR: 1.0 Technology  
Prerequisite: None

This course is a full year course made up of (1) Business Keyboarding, (2) Computer Literacy, and (3) Speedwriting.

Business Keyboarding is learning how to enter data by the Touch System progressing to acceptable speed and accuracy levels. Students will learn to properly format reports, letters, and memos.

Computer literacy is designed to bring students to a level of computer proficiency under state and local curriculum guidelines. Students will be introduced to the Windows operating environment and MS Office, including Word, Excel, Access, and PowerPoint. An introduction to the Internet and e-mail will also be covered. Upon successful completion of this course, students will have a foundation of skill in document processing, spreadsheets and charts, database management, and multimedia presentations.

Speedwriting is an abbreviated writing system based primarily on longhand and secondarily on phonetics. Speedwriting is designed to give the student a way to write quickly with a minimum of learning time and help students improve their spelling, vocabulary, and sentence construction.



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### **560M CAREER EXPLORATION**

**Term: FY**

**Grade: 9-12**

**PBGR: 0.5 Elective**

Prerequisite: None

Students will gain a developmental understanding of their own strengths and weaknesses to enable them to be successful in the ever-evolving requirements of the workplace. As students embark on career exploration, they will learn the relationship of lifelong learning to career success. Students will learn to conduct a career search and identify career pathways. They will explore multiple career paths and the interrelatedness of those career pathways. This exploration will enable individuals to meet the needs of employers who are assembling technically skilled, flexible, and cross-trained workforces.

This course will offer continuous instruction in current and emerging information technology. In this framework, this course will prepare an individual who wants to enjoy a quality standard of living by making them aware that they must be prepared to make wise career transitions and to continuously learn new skills.

### **TECHNOLOGY EDUCATION DEPARTMENT**

### **601M COMPUTER AIDED DRAFTING**

**Term: FY**

**Grade: 9-12**

**PBGR: 0.5 Technology**

Prerequisite: None

The Computer Aided Drafting course will give students an introduction to Computer Aided Drawing. Particular attention is given to Project Design and Development. Using a variety of software, students will be introduced to computer software used in technical fields to create drawing and working plans. The focus of the course is to give students an opportunity to become familiar with the careers available to those who elect to take advanced drawing classes.

### **616M WEBSITE DESIGN & MANAGEMENT**

**Term: FY**

**Grade: 9 -12**

**PBGR: 1.0 Technology**

Prerequisite: None

This course is designed to give students instruction in all phases of website design, website development and website maintenance. Students will become proficient in the use of popular web-design software tools.

### **618M INTRO TO ONLINE COMMUNICATIONS**

**Term: FY**

**Grade: 9-12**

**PBGR: 0.5 Technology**

Prerequisite: None

This course challenges the first year student. It is designed to give the first year student a comprehensive understanding of the world of telecommunications by using the Personal Computer on a local area network to connect to the Internet. The student will interact with other PC users and use the computer as a tool for gathering research in an educational environment. Students will communicate with other users by E-mail (electronic mail) and in addition, will become familiar with reading, understanding and navigating their way through the Internet. On a local level, students will be able to interact with other users in the Cranston School system and in turn, establish a better link between high school and the various feeder schools. Perhaps one of the biggest advantages of this program is the ability to access the Internet and take advantage of the multicultural diversity this program offers. The Internet offers the user the opportunity to access information on hundreds of topics involving many disciplines and subject areas.

This unique and diverse program offers a wealth of information to many subject areas including Social Studies, English, Science, Foreign Languages, Technology and Mathematics.

### **621M DESKTOP PUBLISHING I**

**Term: FY**

**Grade: 9-12**

**PBGR: 0.5 Elective**

Prerequisite: None

This course was designed for students who will be involved in the Journalism class or be a member of the school newspaper. Students will be able to publish their work using computer aided Desktop Publishing. At the same time, students are encouraged to increase their creative skills through the use of a capable word processor and several excellent drawing programs. After students learn how to use the above programs and gain some knowledge in producing minor publications, they are required to produce a seven to ten page newsletter.

### **626M BASIC CAD FOR ENGINEERING A**

**Term: FY**

**Grade: 9-12**

**PBGR: 0.5 Technology**

Prerequisite: None

This course will teach the practical application of a variety of engineering concepts which will include: problem solving, manufacturing processes, engineering codes and standards, geometric dimensions and tolerances, as well as an understanding of how to specify materials for your design. Solid Works will be the software program incorporated in the design process. With the literal explosion in innovation seen as technology, an understanding of the process of moving from idea to produce is essential. Solid Works incorporates technical drafting and introduces the student to elements of communication not touched upon in other parallel courses. This course will introduce and develop the concepts of planning your work to expedite your plan. Within each segment, the student will be guided through instruction, demonstration, hands-on activities, and problem solving techniques. Technology will be experienced not just seen.

### **630 BASIC WOODWORKING**

**Term: FY**

**Grade: 9-12**

**PBGR: 1.0 Elective**



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#### **630M BASIC WOODWORKING**

**Term: FY**

**Grade: 9-12**

**PBGR: 0.5 Elective**

Prerequisite: None

The major thrust of basic woodworking is placed on the development of the basic psychomotor skills, knowledge, attitudes, and good work habits, which are essential for success in today's complex industrial society. Students will be introduced to the proper use of all types of hand and power tools as well as to woodworking machinery. They will be required to select, draw, fabricate, assemble, and complete a project of their choice. The skills, knowledge, and attitudes they gain from the course will be of value in preparing them to make sound educational decisions that will ultimately be of benefit in the career development process. Safety and technique are of paramount importance because of the potential for injury. No student will be permitted access to any machinery until the instructor is certain that the student is totally familiar with it.

#### **634 INTRODUCTION TO MANUFACTURING**

**Term: FY**

**Grade: 9-12**

**PBGR: 1.0 Elective**

Prerequisite: None

This is an exciting class for students who want to learn more about the Manufacturing industry. The vast array of systems and technologies available in today's manufacturing enterprise are surveyed. The students gain an appreciation of range and depth of application possibilities. This course is designed to prepare young adults to go into the world of work, to improve their understanding of manufacturing systems, time management, communication skills, and problem solving.

#### **638 / 638M MECHATRONICS I**

**Term: FY**

**Grade: 9-12**

**PBGR: 0.5 Technology**

Prerequisite: None

This introductory course uses a problem solving approach to teach the principles of robotics. Using kits to design robotic systems to address specific challenges. The students will engineer devices or vehicles and write computer programs to control the devices to meet the challenges. Writing lab reports, keeping journals and applied math and principals of general physics are essential parts of this course.

### **FAMILY AND CONSUMER SCIENCES DEPARTMENT**

#### **651 CHILDHOOD EDUCATION I**

**Term: FY**

**Grade: 9-12**

**PBGR: 1.0 Elective**

Prerequisite: None

This course will include child development and parenting responsibilities from conception through the childhood stages. Physical, emotional, intellectual, and social characteristics of children at different ages levels will be studied. Human development is based on generally defined stages of growth that are observable in all children and can be encouraged by love, care, and proper role models.

#### **662 INTERIOR DESIGN/ REAL ESTATE**

**Term: FY**

**Grade: 9-12**

**PBGR: 1.0 Elective**

Prerequisite: None

This course is designed to discuss the multiple factors in providing housing for the individual or the family. The students learn how to identify architectural styles of homes, read floor plans, and understand the criteria for judging a well organized floor plan. The student also studies the principles and elements of art to create attractive rooms. The guidelines for good furniture arrangement are discussed. The student will develop a floor plan and color scheme to practice the techniques and knowledge learned to reflect his/her own personality.

#### **665 FOODS AND NUTRITION 1**

**Term: FY**

**Grade: 9-12**

**PBGR: 1.0 Elective**

Prerequisite: None

This course is designed to assist the students in planning and preparing nutritious meals which will meet the new Basic Five Food Group requirements and be served attractively. Basic terms and skills will be learned and practiced to accomplish this goal. Special attention will be given to safety practices, comparison-shopping, and label information.

#### **670 FASHION MERCHANDISING I**

**Term: FY**

**Grade: 9-12**

**PBGR: 1.0 Elective**

Prerequisite: None

This course will allow students to explore the field of fashion, clothing construction, and merchandizing. The course is designed to introduce students to the basic elements of garment construction based on line, color, and style. This is a hands-on course and students will master the use of the sewing machine and basic hand sewing. Four projects of choice will be required. Wardrobe planning, garment construction, fashion design, marketing, management and careers in retailing will be explored.



# Cranston High School West

## Program of Studies : Electives – Grade 9

### FINE ARTS DEPARTMENT

**700 FOUNDATIONS IN ART HONORS**                      **Term: FY**                      **Grade: 9-12**                      **PBGR: 1.0 Fine Arts**  
Prerequisite: Teacher recommendation

This is an entry-level course for students wishing to pursue further studies in the Visual Arts. This course is designed to provide an overview of the Visual Arts while allowing students to develop an experience with a broad variety of art media, materials and tools. With an emphasis on studio production, the students will explore and develop skills in drawing, painting, graphic design, printmaking, architectural/environmental design and sculpture. This course, emphasizing art production, is designed to develop higher-level thinking, art-related technology skills, art appreciation, art criticism, and aesthetics. The use of a sketchbook to demonstrate a process portfolio is required. Upon successful completion, students will have proficient knowledge and skills to create, appreciate, assess, and relate art to their everyday lives. This course of study is proving valuable to all students applying to major colleges as part of a well-rounded education. The Foundations in Art course is a prerequisite for Advanced Art 1, Advanced Art 2, and Studio Art.

Proficiency in this course will assist students to fulfill some requirements for graduation in the Fine Arts Standard as required by the Rhode Island Board of Regents. Students will work towards contributing proficient artifacts and reflections to the CPS digital graduation portfolio.

**701 FOUNDATIONS IN ART**                      **Term: FY**                      **Grade: 9-12**                      **PBGR: 1.0 Fine Arts**  
Prerequisite: Teacher recommendation

This course is intended for academically and creatively motivated students who are seriously interested in pursuing further studies in the visual arts. This is an entry-level course for the High School Visual Arts curriculum and is designed to provide an overview of the Visual Arts while allowing students to apply a broad variety of art media, materials and techniques. With an emphasis on studio production, the students will explore in depth, drawing, painting, graphic design, printmaking, architectural/environmental design and sculpture. This course is designed to develop higher-level thinking, art-related technology skills, art appreciation, art criticism, and aesthetics. Additionally, there is a greater emphasis on research, art history, and independent study. The use of a sketchbook to demonstrate a process portfolio is required. Upon successful completion of this course, students will have proficient knowledge and skills to create, appreciate, assess, and relate art to their everyday lives. This course of study is proving valuable to all students applying to major colleges as part of a well-rounded education. The Foundation in Art Honors course is a prerequisite for Advanced Art 1, Advanced Art 2, and Studio Art.

Proficiency in this course will assist students to fulfill some requirements for graduation in the Fine Arts Standard as required by the Rhode Island Board of Regents. Students will work towards contributing proficient artifacts and reflections to the CPS digital graduation portfolio.

**702 ART & DESIGN APPLICATION**                      **Term: FY**                      **Grade: 9-12**                      **PBGR: 1.0 Fine Arts**  
Prerequisite: Teacher recommendation

Art and Design Application is a basic art course, providing students with a general experience in design arts. This course provides an overview and introduction to two and three-dimensional design, fine crafts, a variety of media and cultures. With an emphasis on studio production, this course is designed to develop higher-level thinking, art-related technology skills, art appreciation, art criticism, and aesthetics. Upon successful completion of this course, students will gain proficient knowledge and skills to create, appreciate, and assess multicultural and applied arts. The use of a sketchbook to demonstrate a process portfolio is required for this course.

Proficiency in this course will assist students to fulfill some requirements for graduation in the Fine Arts Standard as required by the Rhode Island Board of Regents. Students will work towards contributing proficient artifacts and reflections to the CPS digital graduation portfolio.

**703 BASIC ART & DESIGN**                      **Term: FY**                      **Grade: 9-12**                      **PBGR: 1.0 Fine Arts**

**703M BASIC ART & DESIGN**                      **Term: FY**                      **Grade: 9-12**                      **PBGR: 0.5 Fine Arts**

Prerequisite: None

Basic Art and Design is an exploratory art course, which provides students with an exposure to the design arts. This course explores a variety of media in two and three-dimensional design, fine crafts, their media and the cultures they represent. With an emphasis on studio production, this course is designed to promote higher-level thinking, art related technology skills, art appreciation, art criticism, and aesthetics. Upon successful completion of this course, students will gain general knowledge and skills to create, appreciate, and assess multicultural and applied arts. The use of a sketchbook is required for this course.

Proficiency in this course will assist students to fulfill some requirements for graduation in the Fine Arts Standard as required by the Rhode Island Board of Regents. Students will work towards contributing a proficient artifact and reflection



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to the CPS digital graduation portfolio.

**740M HUMANITIES: ART AND MUSIC**                      **Term: FY**                      **Grade: 9-12**                      **PBGR: 0.5 Fine Arts**

Prerequisite: None

HUMANITIES (ART AND MUSIC) is both an introduction to the Fine Arts/Music and a historic perspective of selected periods and artists. This course is presented through a sampling of visual art, architecture, artifacts, sculpture, and key pieces from various centuries and movements. The interrelationships among the visual arts and musical forms will also be presented and studied within the context of eras, cultures and societies. In addition to direct observation, discussion and writing, guest artists visits and performance participation; creative art experiences could also be included as an aid to visual understanding. This course is for students interested in combining art and music to learn about cultures and their interrelationships to societies and adheres to the National and Rhode Island Art/Music Standards. Students who opt to take Humanities for Honors Credit must complete additional requirements and projects as designated by the instructor. Enrollment in this class will assist students wishing to use music to demonstrate proficiency in the fine arts as required by the Rhode Island Board of Regents.

**741M HISTORY OF AMERICAN MUSIC**                      **Term: FY**                      **Grade: 9-12**                      **PBGR: 0.5 Fine Arts**

Prerequisite: None

This course will trace the roots of American music as they emerged from a blending of European and African forms. Extensive listening and visual materials are used to enhance the presentation of these American musical styles. Enrollment in this class will assist students wishing to use music to demonstrate proficiency in the fine arts as required by the Rhode Island Board of Regents.

**752 BAND-FRESHMEN**    **Term: FY**                      **Grade: 9**                      **PBGR: 1.0 Fine Arts**

**762 ORCHESTRA**    **Term: FY**                      **Grade: 9-12**                      **PBGR: 1.0 Fine Arts**

Prerequisite: Audition/instructor recommendation

This is a performance class for string instrumentalist of intermediate to advanced levels which offers instruction through performance of string ensemble music combined with scale study and individual instrument instruction. Performances are a mandatory part of the ensemble experience and include winter and spring concerts. Instruments limited to violin, viola, cello, and bass. Enrollment in this class will assist students wishing to use music to demonstrate proficiency in the fine arts as required by the Rhode Island Board of Regents.

**772 CHOIR**    **Term: FY**                      **Grade: 9-12**                      **PBGR: 1.0 Fine Arts**

Prerequisite: Audition/instructor recommendation

This course is an in-depth approach to singing, choral literature, and performance. It is offered to the serious, qualified student vocalist. Developing music reading skills and sound vocal technique will be the main objective through much of the first quarter. Literature and performance skills will be emphasized in the remaining quarters. Participation and commitment are an integral part of this course and much of the grade (50%) is determined by your presence and performance with the group. Some evening rehearsals and all concert performances are mandatory.

Enrollment in this class will assist students wishing to use music to demonstrate proficiency in the fine arts as required by the Rhode Island Board of Regents. CHOIR HONORS requirements include solo preparation for the Rhode Island Music Educators Solo/Ensemble Festival. Private instruction is strongly recommended for honors students.

**772M CHOIR**    **Term: FY**                      **Grade: 9-12**                      **PBGR: 0.5 Fine Arts**

Prerequisite: Audition/instructor recommendation

This course is designed for those students who display exceptional commitment and ability in choral music. The repertoire is challenging. Rehearsals are held three days a week before school. Acceptance is based upon an audition. Concerts are held throughout the year and attendance at all concerts is required. Enrollment in this class will assist students wishing to use music to demonstrate proficiency in the fine arts as required by the Rhode Island Board of Regents.

**775M VOICE CLASS**    **Term: FY**                      **Grade: 9-12**                      **PBGR: 1.0 Fine Arts**

Prerequisite: Audition/instructor recommendation

This course is open to all students who enjoy singing and would like to be part of a chorus. Instruction in vocal techniques, exposure to choral literature, and instruction on learning to read music is provided. Enrollment in this class will assist students wishing to use music to demonstrate proficiency in the fine arts as required by the Rhode Island Board of Regents.



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### **780M MUSIC THEORY I**

**Term: FY**

**Grade: 9-12**

**PBGR: 0.5 Fine Arts**

Prerequisite: None

Music Theory I is an introduction to the language and mechanics of basic theory and composition. Subject matter includes use of the staff, notation, scales, key signatures through modulations and transpositions. Enrollment in this class will assist students wishing to use music to demonstrate proficiency in the fine arts as required by the Rhode Island Board of Regents.

### **INTERACTIVE DIGITAL MEDIA / COMPUTER TECHNOLOGY PROGRAM**

### **820 INTERACTIVE DIGITAL MEDIA/COMPUTER TECHNOLOGY**

**Term: FY**

**Grade: 9**

**PBGR: 0.5 Elective**

Prerequisite: Sophomore status and program application

The primary purpose of the Interactive Digital Media /Computer Technology program at the Cranston Area Career and Technical Center is to provide instruction in computer technology that will prepare students to meet the technical demands of high-skill, computer-related career opportunities. Topics focus on the use and mastery of computer technology skills as essential to their careers.

### **881M A+ HARDWARE**

**Term: FY**

**Grade: 9-12**

**PBGR: 0.5 Elective**

Prerequisite: Sophomore status

A+ Hardware is a one year elective. Students will learn about computer hardware architecture. Students will learn how to maintain, troubleshoot and repair computer hardware problems. The A+ class is a world wide recognized program which is linked to the A+ Hardware exam. Upon passing the A+ exam students will have an advantage finding a job in the computer field. The CACTC A+ class also has College articulation agreements with CCRI, New England Tech and Gibbs College. Students could receive College credits for taking associated classes at these Colleges. Students can participate in the SWATS program which allows students in the program to perform hardware and software repairs and troubleshooting in CHSW and CACTC.

Students learn about computer hardware, software and operating systems. Students will do a great deal of hands-on labs involving computer hardware, networking, and computer troubleshooting. Students will learn to repair and upgrade computer systems. Students will learn to install operating systems and properly set them up. Students will learn troubleshooting techniques needed to properly repair hardware and software problems. The curriculum will be the Thompson A+ hardware and software books with software. Students will take practice A+ hardware and software exams in preparation for taking the A+ exams. Upon completion of this course students can take the A+ hardware and software exams for certification.

### **882M A+ SOFTWARE**

**Term: FY**

**Grade: 9-12**

**PBGR: 0.5 Elective**

Prerequisite: Sophomore status

A+ Software is a one-year elective. Students will learn about computer software and operating systems. Students will learn how to maintain, troubleshoot and repair computer software problems. The A+ class is a world wide recognized program which is linked to the A+ software exam. Upon passing the A+ exam students will have an advantage finding a job in the computer field. The CACTC A+ class also has College articulation agreements with CCRI, New England Tech and Gibbs College. Students could receive College credits for taking associated classes at these Colleges. Students can participate in the SWATS program which allows students in the program to perform hardware and software repairs and troubleshooting in CHSW and CACTC.

Students learn about computer software and operating systems. Students will complete a great amount of hands-on labs involving computer hardware, networking, and computer troubleshooting. Students will learn to repair and upgrade computer systems. Students will learn to install operating systems and properly set them up. Students will learn troubleshooting techniques needed to properly repair hardware and software problems. The curriculum will be the Thompson A+ hardware and software books with software. Students will take practice A+ hardware and software exams in preparation for taking the A+ exams. Upon completion of this course students can take the A+ hardware and software exams for certification.



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