FRAMINGHAM HIGH 2022-2023 ELECTIVE CHOICES FOR 9TH GRADERS

To see the elective choices in each department, click on the blue links below. Courses that have (SEM) are semester long courses (they meet for half the year).

MATHEMATICS COURSES TECHNOLOGY COURSES THEATER COURSES HISTORY COURSES MUSIC COURSES ART COURSES FAMILY & CONSUMER SCIENCES COURSES DANCE COURSES PHYSICAL EDUCATION

243 - Programming C ++ Part I H (SEM) is for the new computer science student. No prior experience in computer science or programming is necessary, as concepts and theory will start from the very beginning. Top-down design (planning the solution of a problem in detailed steps before putting it into code) will be stressed. Problems will be taken from math, business, and other areas. Topics studied include variables, input/output, flow of control, loops, and functions. This course counts as half of a credit in mathematics or practical arts. Required: Successful completion of Algebra 1

241 Programming in C++ Part 2 H (SEM) is a continuation of Programming in C++ Part 1. The course builds on the topics studied in Part 1, moving into more advanced structures. Topics studied include file streams, structures, classes, friends, overloaded operators, arrays, strings, and vectors. Due to the complexity of some of these topics, only students serious about computer programming should sign up for this course. This course is a prerequisite for AP Computer Science A: Java. This course counts as half of a credit in mathematics or practical arts. Required: Successful completion of Programming in C++ Part 1

531 Web Design/HTML ACP (SEM) Make your own web sites! Students will learn how to create web pages, evaluate the authenticity of on-line information and develop computational problem solving skills. Students will explore the role of the World Wide Web in today's society. Students will gain a broad understanding of the HTML, CSS and JavaScript computer languages.

539 Digital Photography 1 ACP (SEM) explores the use of technology in the "digital darkroom." Students will learn how digital cameras, scanners and printers operate and are used to process digital images. Adobe Photoshop will be used to edit, manipulate, and create images. Concepts will include computer systems and technology, pixel resolution, file formats, saving and storing images, composition, and tool skills to produce creative digital images. The Internet will be used as a resource.

544 Digital Graphics 1 ACP (SEM) introduces the student to the world of digital graphics and the computer applications used by graphic professionals. In a fun, hands-on environment, the course will primarily focus on the basic use of industry standard tools such as Adobe InDesign, Adobe Photoshop, and Adobe Illustrator. During this exciting process of learning, students will be exposed to career options in desktop publishing, image editing, illustration, and new graphics related jobs such as user design/user interface. No drawing experience necessary.

549 Video Production 1 ACP (SEM) trains students to utilize cameras and equipment to develop productions for broadcast on the Framingham Education Channel and its website. Lessons include projects and productions ranging from In-Camera / Autobiographical Videos, to In-studio commercials and Point of View videos. Students are introduced to video editing on Adobe Premiere, the business of television, and institutional basics. Each student must produce 5 sporting or other extracurricular events for broadcast per semester.

556 Robotics I ACP (SEM) is an introduction to robotics with a focus on building, programming and computational problem solving strategies. You will build and program a robot using the VEX robotics system to meet different

challenges. You will work hands-on in teams to build, program and document your progress. There will also be a focus on the usage of robotics in automation and manufacturing.

560 Engineering Drawing & Design 1 ACP (SEM) is one of the best choices to communicate and present designs in the engineering design process. It is the universal language of technology. Students will learn 2-dimensional and 3-dimensional visualization skills that will assist them with the study of geometry and the planning process in technology education. Basic drafting techniques are taught along with an introduction to Computer-Aided Design (CAD) using computer software.

568 Computer Gaming 1 ACP (SEM) Students will learn how to design, code and create video games. This course introduces students to the key concepts of game development using coding software. Students will create various single player games and programming debugging practices.

680 Acting I (SEM) A fast paced workshop format designed to develop and strengthen acting, observation and listening skills, through exercises in creative movement, improvisation, creative dramatics, pantomime and theatre exercises. The central focus of this beginning level class is to build an ensemble within the class and begin to reflect on our own inner resources as an actor and build solo performance skills. The structure of the class breaks down into 75% on your feet and 25% in your seat!

681 Acting II (SEM) The ultimate goal is for the actor to be able to utilize his/her body in the most expressive, specific, communicative and imaginative way possible. The class will work through a series of projects, each one building on the ideas and discoveries of the one before it. The class is lab-based and interactive; students are asked to work together on projects in pairs or groups, regularly observe each other's work and actively engage in discussions of the ideas, issues, solutions and discoveries that are explored throughout the semester. Students will have in-class performances at the end of each unit. Students will be required to participate in the public performance of a One-Act play in the evening.

684 Musical Theater I (SEM) is designed for the performance level student who wants to work in musical theatre. The student deals with some elements of performing, singing and stage movement/dance as required for particular genres of musical theatre. MT-I will focus on the various contributions of many composers/lyricists of the Broadway stage, including such notables as Cohan, Friml, Kern, Herbert, Rodgers, Hammerstein, Berlin to name a few. An occasional class session will be devoted to vocal practice, dance and the viewing or studying of musical comedy scripts. Students will also study the early historical influences of the American Musical Theatre. Acting the Song techniques will be taught through block period review sessions and culminate in a Musical Theatre revue. This course is team taught by the Music and Theatre Arts staff. This course meets the Fine Arts requirement. Students will be required to participate in performance scheduled outside of class.

685 Musical Theater II (SEM) is a continuation of Music Theatre I with a stronger emphasis on performance. Students will study composer teams from the Golden Age of Musical Theatre up to present day. Musicals studied include: *Oklahoma!, West Side Story,* and *Cabaret.* Students will further their understanding of song performance and character development that culminates in a revue or small musical production. Students will be required to participate in performances scheduled outside of class.

463 Global Conflicts ACP (SEM) In this discussion-based class, students debate major past and present world conflicts. The course will examine totalitarian dictatorships, peace studies, and conflict resolution within the context of international relations. Topics will include study of conflicts in the Middle East (Israel and Palestine, Iraq, Afghanistan), China, Africa, and Latin America. Students will work to understand why these conflicts occur and debate possible solutions.

678 FHS Chorus (FY) This class is for all grades interested in becoming better choral and solo singers. Students will learn basic music theory, movement, sight singing, and how to be part of a choral ensemble. Both standard and popular works are included. Students will be encouraged to learn solos and will learn about the history of musical theatre in the United States. The chorus will sing in the Winter, Pops, and Festival Choral Concerts. Participation in all scheduled performances is required.

669 Orchestra (FY) The Orchestra is an ensemble for students who have some experience playing a stringed or wind instrument (violin, viola, cello, string bass, clarinet, flute, trumpet, etc.). Fundamentals of string technique and music reading are stressed. Orchestral literature from all periods of composition is used to build repertoire for programs throughout the year. There will occasionally be after school commitments for school and community performances. Participation in all performances is required.

676 Piano Keyboard I (FY) Utilizing the Music Department's Keyboard Lab, students will learn the basic music theory elements that are involved in playing the piano. Students will work at their own paces and be exposed to various types of piano literature spanning the Renaissance to Classical eras. Research assignments will include differing styles, composers, pianists, pedagogues, musical form, and historical perspective. Students will be expected to practice outside of class, although a piano keyboard is not a requirement to be in the class. Students will be required to participate in performances scheduled outside of class.

673 Freshman Band (FY) Instrumental music ensemble made for musicians in the 9th grade, transitioning from the middle school band setting. The essential goal for the class is to bridge the gap between middle and high school band where students go from having music once a week, to 5 times a cycle. It will also introduce students to a more difficult level of concert band literature, without having to make the jump to literature appropriate for grades 10-12. By the end of the course, students will feel comfortable joining older students for band in the tenth grade. Like the 10-12 band, the concert season will include 2 performances (December and May) as well as the option for competition in a MICCA band festival (March) as well as other community performances. Participation in all performances is required

674 Beg. Guitar Techniques (SEM) The course is open to any student who wishes to learn how to play the guitar. Students will learn to play single notes, basic chords, and common strumming techniques. In addition to the guitar, students will also learn basic music theory including notes and scales. This course will also give the students some background in the history of the guitar and current uses in popular music. There will be playing and written assignments. There is the possibility of one after-school performance requirement for this course.

545 Photography I (SEM) is an introduction to the fundamental, technical, and aesthetic issues of photography. Photo 1 is completely based on DSLR cameras. Students will have thorough instruction of DSLR camera operations, file editing in Adobe Photoshop, along with best practices in use of file types, lens choice, and file conversion. Through a variety of lectures, demos, research and projects students will understand the elements of composition and how to implement them into their own photography. Students will also engage in the criticism of their own work, and with the work of historical and contemporary photographic artists.

642 Foundations of Visual Art (SEM) In this course, students will have the opportunity to work with all 4 visual arts teachers. Each teacher will lead students through projects based in Photography, Ceramics, Mixed Media, Drawing and Painting. This course serves as the gateway for future art electives and is designed to help students understand the multiple avenues in which one can make artwork. Elements and Principles of Design common to all visual arts, along with the Studio Habits of Mind, will be stressed. Strategies for understanding and evaluating historical and contemporary art will also be developed. By the end of this exciting, rotating course, both "beginning" artists as well as more advanced students will have the foundation needed to continue on the path of artmaking that they choose.

651 Mixed Media Crafts ACP (SEM) This course introduces students to the contemporary world of crafts. Each unit will allow students to become familiar with new techniques, processes, and media, such as weaving, fiber arts, artist books, unconventional mixed media and much more. Students will focus on the process of creating as well as the final product and both informal and formal critique. Traditional crafts and various cultures will be investigated to provide a context and inspiration for students' art making.

655 Painting and Drawing (SEM) This is an introductory class for students who wish to learn techniques of painting as they learn about color, design, texture and the other elements of art. They will gain experience in pencil, charcoal, and pastel in addition to acrylic and watercolor. Students will create a variety of painting projects both from observation and imagination including still life, landscape and portraiture. The students will learn to critically evaluate art and will be exposed to the works and styles of painters and movements throughout history. Students will participate in both informal and formal critique.

630 Ceramics I (SEM) This is a hands-on introductory course in clay. Students will be introduced to basic hand building and wheel throwing techniques, and learn the fundamental processes of texturing, glazing and firing clay. After becoming familiar with the unique properties of clay, students will learn to make mugs, vases, bowls and other functional objects. Sculptural pieces will also be explored.

612 Child Growth & Develop ACP (FY) is designed to provide the most current and comprehensive information on child development, parenting, and careers in early education and child care. We will focus on the importance of studying children, the role of families and the meaning of effective parenting. Students will have opportunities to observe and interact with the children who attend our on site child care and preschool classrooms. This class is a prerequisite for Infant and Toddler Care (623) and Early Childhood Education Honors (621), the next two classes in our Child Development career path

606 Clothing 1 ACP (SEM) is designed for the beginner student who is interested in sewing both by hand and machine. Students will learn basic skills by using all the modern equipment in the clothing lab. Students will also be able to understand how to use, care for, a variety of fibers and fabrics. This information will enable you to create successful projects through the medium of textiles. This course is a prerequisite for Advanced Clothing (607) and Fashion Design (602) the next two courses in the Clothing and Fashion career path.

600 Foods 1 ACP (SEM) is designed as an introduction to food, nutrition and safe cooking. Students will learn to plan and prepare food, while focusing on healthy food choices. The skills of planning, cooking, and cleaning the kitchen after cooking are practiced in weekly hands-on lab experiences, lessons and activities. This course is a prerequisite for Advanced Culinary Skills ((624) and World Foods (602) the next two classes in our Foods career path.

614 Interior Design ACP (SEM) is an introduction to the study of our ever changing residential environments. Students will study the impact of technology, new products, and lifestyles on housing. Using the elements and principles of design, students will create an original interior design/art work portfolio. Skills include sketching, drawing, budgeting, and decision-making.

672 Intro to Dance (SEM) Introduction to Dance provides a dance overview for students to Dance as a discipline. Students become acquainted with basic technique in ballet, modern, jazz and tap as well as a physical awareness that is critical throughout their lives. Gaining movement skills and finding confidence through movement are a focus of this class. No previous dance experience is necessary. This course may be used for Physical Education credit for juniors and seniors.

730 Fitness for Life Grade 9 (SEM) is a semester course that provides students with team-building activities, cooperative group lessons, the importance of flexibility and nutrition, and are exposed to both the muscular and cardiovascular machines within Wellness Center. Students will comprehend the difference between health-related and skill-related fitness and will understand the importance of how improvement will impact their daily life. Students will learn the basic functions of nutrition and how to break down a food label as well as learn the importance of body composition and how it is measured. Additionally, by incorporating the Fitnessgram program into our curriculum, students will see their fitness progression, while understanding the importance and benefit of lifelong activity and healthy choices.

739 Activity Fitness Grade 9 (SEM) The information presented in this course will be the same information presented in Fitness for Life. Students who prefer to achieve their fitness through participating in activities outside of the Wellness Center should select this course.