



AUGUST

Extracurricular activities begin at the start of each academic year.....

Mass Academy students enjoy a vibrant extracurricular life. Students participate in extracurricular activities a minimum of three out of four terms at Mass Academy or with their sending school, but many students choose to participate all year round in multiple activities. Students explore topics of interest such as photography, cooking, kickboxing, movie making, and mock trial. They may also participate in music and theater programs at WPI, join Mass Academy World Champion (2007) FIRST Robotics TEAM 190, represent their sending schools on athletic teams, or participate in other school sponsored activities. We also sponsor many events during the course of the year including café nights, video game nights, a winter semi-formal, a prom and other class activities. Here is a partial list of extracurricular activities.



Mock Trial - Over the past twelve years, Mass Academy has participated in the Central Massachusetts district of the Massachusetts competitive Mock Trial Program, which provides high school students with an understanding of the American judicial system and the opportunity to further develop their skills in critical thinking, public speaking, reasoning, and persuasive argumentation. Students are assigned the roles of witnesses, prosecution attorneys, and defense attorneys as they assemble their case in preparation for competing against other schools in our district. Mock Trial is offered as an extra-curricular during Terms A, B, and C. Term A focuses on understanding the U.S. court system and the rules of evidence; Term B concentrates on understanding legal procedures and developing a case; Term C focuses on refining the case and competing against other schools.

Fitness - Come work out and get in shape together. A variety of strength and conditioning activities will be used to create a challenging work out experience for everyone. Our objective will be to improve over all fitness and have fun while doing it. We will work on improving strength, endurance, flexibility, and mobility. Activities may include: running, interval training, circuit training, resistance training, and stretching. Activities can be modified to accommodate many ability levels, so everyone is welcome.

Robotics - After broadly covering general robotics systems, the group divides into two groups. One group spends the remainder of the term focusing on the applied physics/mechanical engineering aspects of robot design: principal topics included force analysis, power transmission, DC motors, pneumatics and engineering materials. The other group focuses on robot control and programming: principal topics included sensors, electronics, C/easyC programming, and autonomous operations.

Art Club - This extra-curricular club will focus on the visual arts. The club is intended for those with an interest in the visual arts to share, learn, and enhance their artistic skills. The focus will be on drawing and painting, but other media can also be explored. Options for inspiration will include field trips to outdoor settings for sketching and painting as well as to the Worcester Art Museum.

Savage Soccer - Students will form teams and build robots to compete in the 2013 Savage Soccer robotics competition. For this challenge you will design, build, test and then improve robots that can be as competitive as possible playing against 50-60 high school teams from around New England.

Cardio Kick Fitness Fusion - This class is a stress relieving, fun mix of cardio kickboxing, strength/core training and yoga. The class format will be the following:

35 minutes cardio kick: A blend of choreographed kickboxing moves and hip-hop music/dance

20 minutes core/strength training: Simple but effective moves using your own bodyweight or resistance bands to improve strength

20 minutes: Vinyasa style yoga for increasing power, balance, flexibility, and mental focus

FRC Team 190 Robotics - This is an extracurricular for active FRC Team 190 members. Extracurricular time will be used to work on all the tasks required to get the team ready for competition. Items will include such things as brain-storming, design analysis, detailed mechanical, electrical, and programming design, subsystem prototyping, parts manufacturing/assembly, as well as a variety of support activities such as spirit activities and awards submissions.

Digital Photography - In this extracurricular you will explore the art of photography including Composition and the Elements of Design. Each student must have his/her own digital camera, or exclusive access to one. The digital camera can be a high end or basic model, but not a cell phone. This extracurricular will include walking tours and some light homework (to take pictures).



Rugby and Basketball - It's time to run off some the winter blues. One day a week will be devoted to touch rugby and the other to indoor basketball. Enjoy this engaging, physical extra-curricular activity rain or shine.

Machine Sewing - This extracurricular is for both experts and beginners. Advanced tailors can simply bring a project to work on while beginners will learn how to make a tote bag or a purse. It's going to be sew fun.

CAD - This extracurricular course is intended to give students experience in designing and analyzing 3 dimensional (3D) parts and printing them using a commercial 3D printer. Parts will be integrated together on

the computer to form assemblies, which can then be used for motion analysis thereby demonstrating how a machine will work when complete. This course will use SolidWorks to create parts and assemblies; the software was selected based on its widespread use in industry as well as being the core engineering software package used by engineering students at WPI.

Lab Tech - The Lab Tech extracurricular will introduce students to basic techniques and protocols used in labs today. This hands-on course will focus on techniques and equipment used in biology research, but will also discuss experimental design and recent publications. Lab Tech will be helpful for any students planning to use lab equipment for their STEM project and all students will receive a certificate in lab safety and equipment use.

Mass Academy SPLASH - Do you have some unique talents and interests? Here is a chance to share your skills with other Mass Academy students who want to learn from you. Options include origami, game strategies, magic tricks, science demonstrations, crafts, artistic techniques, cookery, and more—virtually anything hands-on that you can teach to a group and that would interest others. Activities in this elective will be student-generated and student-run, so we must have a minimum of seven participants for this elective to be held.