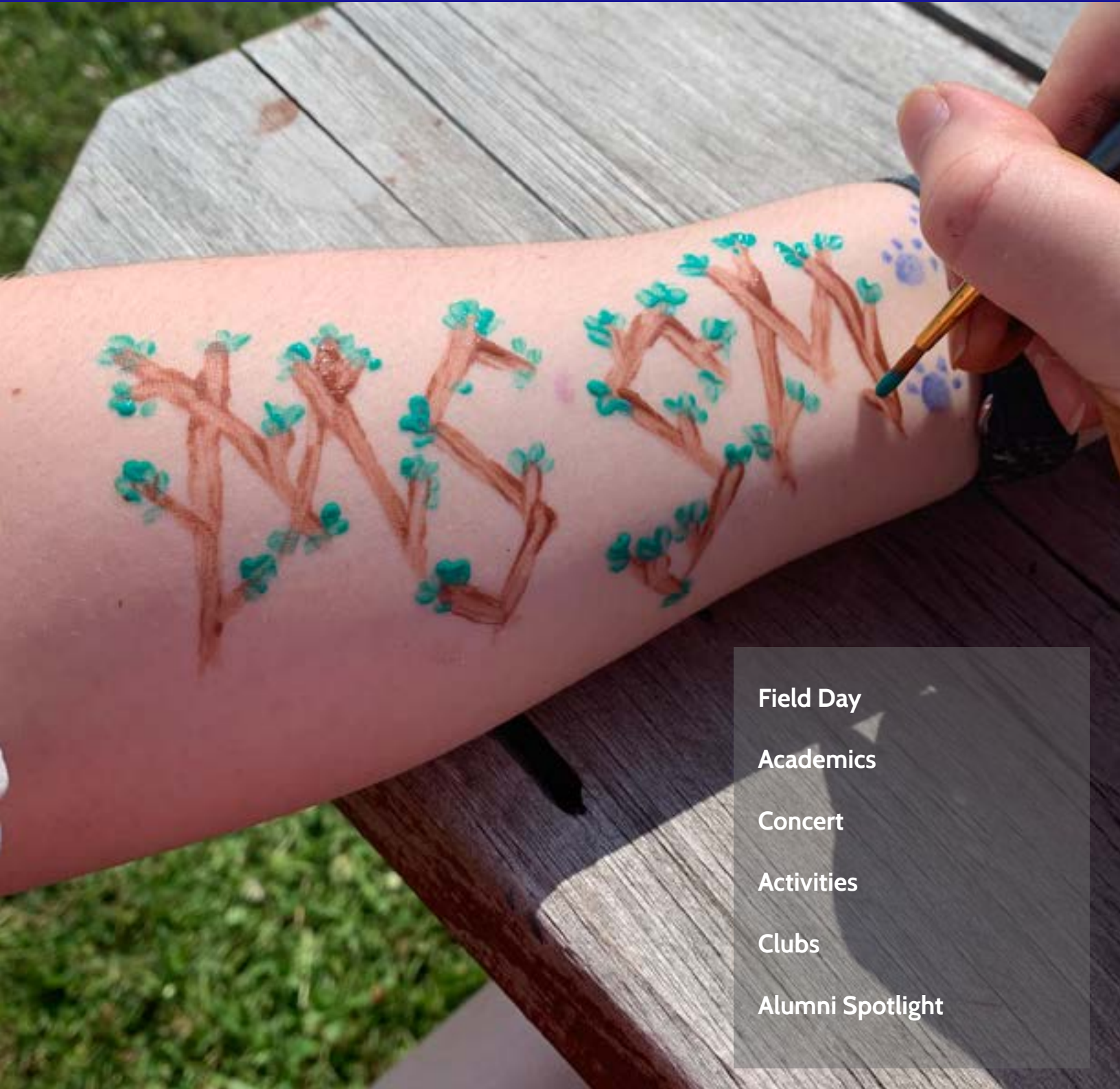


MSSM

Community Update

Fall 2021



Field Day

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Alumni Spotlight

#First Days



Tracy Moore, HR Manager, and Sam Critchlow, Executive Director and MSSM alum from 2001, are the first faces new students saw at check in.



Annabelle checks in to start her MSSM journey. Oh the places she will go.



Jeff Candura, Director of the MSSM Foundation, and Deb McGann, Title here, meet with Tracy Moore at check in.



Families ask Cindy Farley, the Registrar, questions about class schedules and receiving UMPI credit for classes.



Some new students mingle with returning students just after check in. They are sitting in the lower lounge near the TV.



The Admissions department sells penguin merchandise at many school events and are now able to take credit cards. If you want to order something or just want more information about what is available contact admissions@mssm.org.



Alan Whittemore, Dean of Enrollment Management and employee #1 from 1994, opens the group session with how excited he is about this year.

The Residential Assistants (RAs) are seniors who go through a vigorous application and interview process. They are peer leaders who help students with day-to-day issues in all aspects of MSSM.



Sam Critchlow talks to everyone about the MSSM experience and how happy we are to be in-person this year.

Melanie shows Paige how to get to her room. Hadley supervises.



#Field Day



Paige D. and Mrs. Berube (English and Fine Arts Department Chair) watch Mr. Desneiges (French) show off some of his musical instruments.



Mr. Eugene Katsman (Physics) brought a mini forge and showed the basics of metal fabrication. As a result, a Blacksmithing Club has formed.



There were activities for all including chalk drawing on the basketball court.



Calvin A. prepares a long-tailed kite as he walks toward the field.



Allie S. and Ben B. practice their levitation skills by making a cornhole beanbag float in mid air.

Mr. Dougan (Chemistry) demonstrates how to make Nitrogen ice cream.



#Kickball & S'mores



James kicks the ball in the aptly named game, Kickball.



Alden gets ready to get a homerun while others watch.



Some students chose to watch the game rather than participate. There was a nice crowd at one point.

Students walk directly from the kickball field to the campfire to have a chance to talk and make S'mores. We ran out of supplies and had to buy S'more.

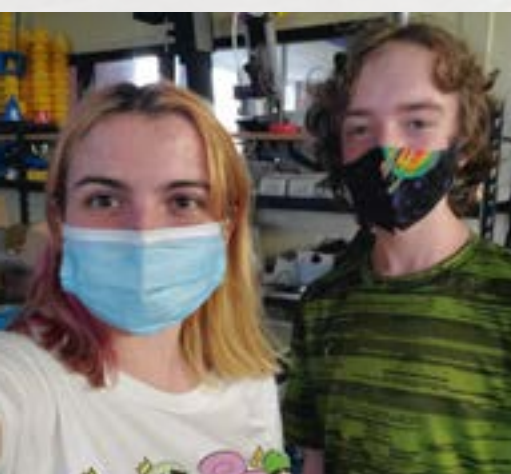


Raymond (Residential Assistant) carries the ball back as they change sides between innings.

First year Erin enjoys a S'more.



#First Year Support



MSSM has a great first year student support network. One area is where the Residential Life staff will match returning students with new students. Here are some photos from the week of check in where the new students are walking around with their peer leader. It gives them a time to ask real questions about the campus and MSSM experience, see the facilities, and to get to know each other.

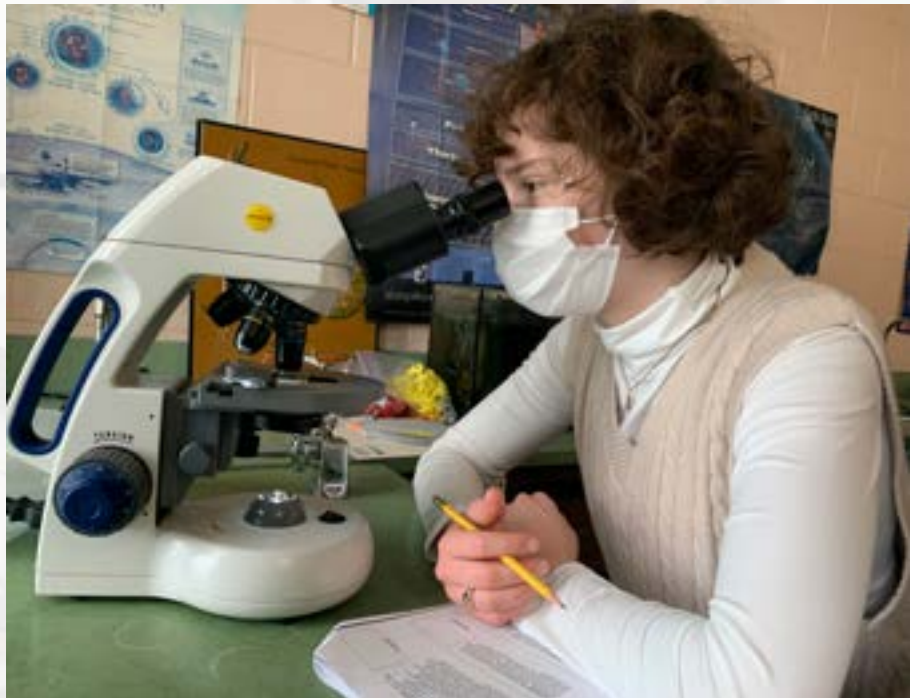


#Academics



Cycling

Go ride the roads with Mr. Tasker, and get some healthy exercise along the way. Students need to have a bicycle and a bike helmet in order to participate.



Applied Genetics & Biotech

Advances in genetics and biotechnology have a huge impact on daily life, with applications in fields such as medicine, forensics, agriculture, conservation, natural history, and many others. In this course we will learn about DNA and RNA, gene structure and function, protein synthesis, and cell biology. We will also use tools such as PCR, electrophoresis, restriction analysis, gene sequencing, and bioinformatics databases in several projects on personalized medicine and the human microbiome. We will also discuss various biotechnology applications, ethical issues and controversies surrounding its use.

#Academics

Dr. Eustis-Grandy's /Ecology/ class has been going out to the forested area behind the school each week as part of a Forest Community Analysis project. Students have laid out two transect lines, and at regular intervals along each transect they are collecting data on plant community composition, soil properties, and wind speed/air temperature/dew point temperature. The class also installed automated data loggers on each transect which will record hourly measurements of air temperature and light intensity for approximately 45 days. One of the goals of the study is to see how previous land use history has impacted present day forest community structure.



#Academics



SCI 220 Chemistry

This survey course covers measurement, electron arrangement, periodicity, chemical bonding, reaction rate, acids and bases, and organic chemistry. The approach is lab-centered and utilizes a historical perspective to emphasize the role of chemistry in society. Chemistry is appropriate for students intending to pursue careers in the health field or non-science areas.

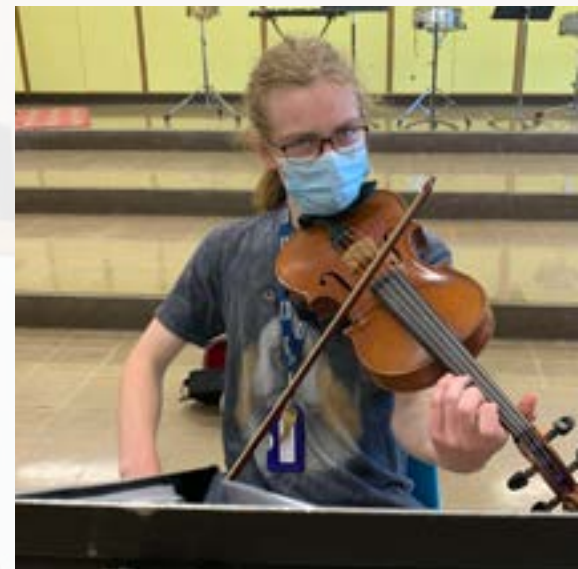


PHY 102 Trad Fit

Traditional Fitness

Students who opt to take a traditional fitness class will attend two one-hour sessions per week that are led by an instructor from the Residential Life staff. These sessions will provide each student with the opportunity to participate in a comprehensive program consisting of skill development, lead up games, team sports, individual sports, and physical fitness activities indoors and outdoors. The students will also receive instruction in rules, skills, and strategies associated with the different sports as well as learning experiences involving physical conditioning activities and lifelong physical activities. Traditional Fitness classes promote the spirit of cooperation, leadership, fair play and friendly competition.

#Academics



FAR 181 String Ensemble



#Academics

Students in French 311 having been working on a three week chemistry workshop with hands-on experiments looking at a wide variety of chemical reactions, working on lab sheets, and learning how to explain, in French, what they are doing and the scientific processes at hand.

Les étudiants en français 311 travaillent depuis trois semaines sur un atelier scientifique avec laboratoires. Ils font plusieurs petites expériences chimiques tout en apprenant à parler des explications scientifiques et à identifier les réactions différentes. De plus, ils créent un portfolio de travail écrit pour leurs feuilles d'observation dans le cadre d'un cours d'immersion.



FRE 311 French Pre-Immersion



French 311 STEM immersion students taking a break between their Advanced Mathematics lesson and the upcoming Anatomy and Physiology lesson with a short humanities topic. Students are studying African culture, in particular masks, and are learning how to do papier mâché in this two week immersion workshop.

#Concert



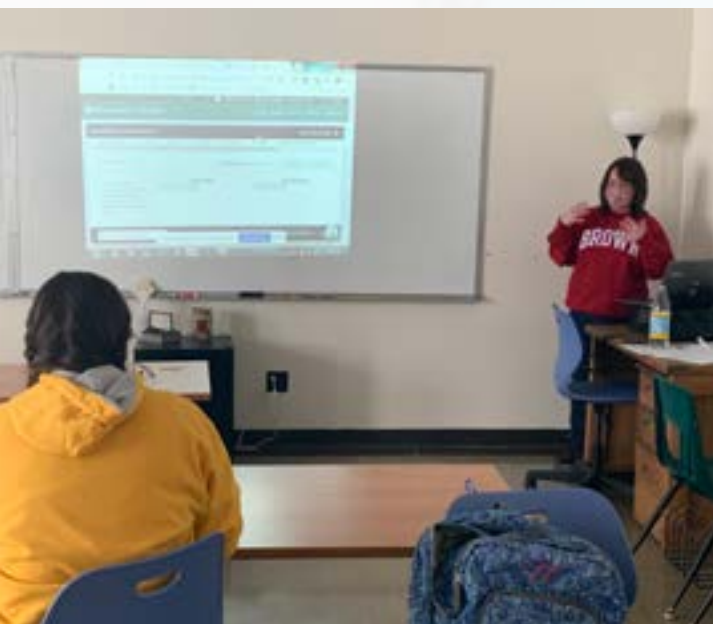
Click the link

<https://www.youtube.com/watch?v=SJa4ISl2myY>

Or open your camera app and scan the QR code to the right to watch the concert on your phone/tablet.



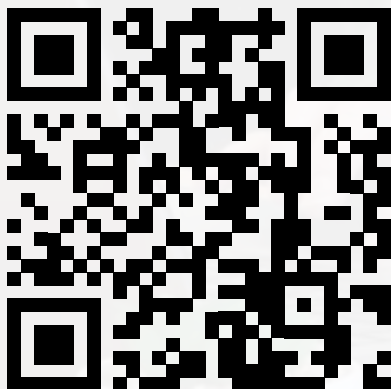
#College Counseling



MSSM College Counseling Podcast

Click the link

soundcloud.com/user-822501893/sets



The above photo, taken in 2019, shows Martin Brozman ('20) giving a presentation to the class about a college in which he is interested. This gives them the chance to not only explore a few colleges in depth, but also to practice presentations and teach other students about other options.

Read all about MSSM's
College Counseling Classes

Click the link

www.mssm.org/academics/college-counseling

#PSAT Day

While some students were taking the PSAT, others had various things to do. Some first years had activities around the dorms. Seniors took the time to work on their college applications and have one-on-one sessions with the faculty in the lower lounge. They were also allowed to sleep late. Breakfast snacks and donuts were provided.



#Lower Lounge Life

The MSSM Dorm Lower Lounge has a life of its own. It's where students hang out, do activities, watch TV, play video games, and even study. It's a nice large open area that even has a kitchen attached. It's popular year round with both the school and summer camp.



Along with a big screen TV, there is a DVD player and several titles to the left, as well as a Wii. After classes, this area is always full.



It's not puzzling why our students are drawn to this type of challenge. It is puzzling as to why they would pick a hard one.



Other students enjoy playing Magic the Gathering. It's also a great place to collaborate on homework problems.



Paige and Michael play a board game version of Rubik's Cube. Students who like drawing gather to be creative.



#Activities

Thanks to a large donation of scrapbooking and other arts and crafts items by a graduate's mother (thanks Denise Witmer), students were able to enjoy making a variety of things. One popular item this time was using a small press to cut out images. There were several shapes from which to choose and a popular one was the small fish shown below.



#Activities

The Student Activity Board (SAB) hosted a BINGO night in the dorm led by BINGO Master BaoBao Nguyen. Though technically BINGO, the game was actually called BLAMO in honor of Mrs. Rhodes' dog of the same name. The students that won would get some MSSM Swag.



#Activities



Apart from ensuring the safety of students, Residential Instructors also plan various activities in the dorm.



#Clubs



Eugene Katsman (Physics Instructor) was demonstrating blacksmithing on field day, with students being given the opportunity to try their hand at blacksmithing. Several students approached him about being an advisor for a metalworking club. Sage Santomenna took the lead in organizing the club and the MSSM Metalworking Club was formed.

Students meet in Mr. Katsman's room to make all manner of metal creations: sculptures, jewelry, armor, etc. Mr. Katsman has been a blacksmith for more than 30 years and instructs students on safety guidelines and best practices.



#eSports

MSSM had its first eSports competition, which is our newest varsity-level competitive sport. Our team consisted of 5 players under the guidance of team captain Benji Gilman, a senior from Danforth, Maine. Gilman was also the one who pushed for MSSM to take on this new sport. It's well suited for MSSM because of the competitive nature of the students and the fact we are a boarding school.



On Tuesday, Oct 5th, MSSM competed in a match with Deering High School from Portland. There were two matches with our team of 5 against Deering in the game League of Legends, a popular eSports game. League of Legends launched originally in 2009 by Riot Games and is a team-based strategy game which is perfectly suited for eSports competitions. It is under the category of MOBA (multiplayer online battle arena). The final scores were 34-8 and 36-6, with each one lasting less than 25 minutes.

eSports (or Esports) uses multiplayer video games with either teams against teams or 1-on-1 competitions. Though mostly amateurs early on, now many groups are professionals around the world. eSports have already influenced the way game developers create new games. This is now considered to be a varsity level sport in many states including Maine.



Benji competing in a recent match.



Henry T.

#Dance



Even the fish enjoyed the dance and swam around festively

#Work Assignments

MSSM believes in the importance of being a positive and active member of the MSSM community. Work assignments provide MSSM students with a formal opportunity to engage in that role. All students are required to participate in a campus work assignment for two hours each week. Work duties are generally based upon a mutual request by students and supervisors.

The Director of Residential Life oversees the work assignments and is responsible for finalizing assignments and communicating with campus work program supervisors regarding students' performance, attendance, attitude, and punctuality.



Cecilia and Dylan work in the dishwashing area.



Andrew works on cleaning tables.



Erin & Pipsa help sanitize tables after lunch.



Rex sorts clean silverware.

#Work Assignments



Hazel organizes school merchandise in the Admissions office. She also helps with mailings and the bulletin board.



Part of Noah's WA is tending to the fish in the lower lounge. He said he finds it relaxing.



Brian helps clean up scientific equipment after labs.

First year students usually get the “right of passage” **dish duty** while returning students can arrange other work assignments such as the ones shown on this page. There are many other duties, but they are not photographically attractive.



Lee maintains the plants around the RI office and lower lounge.

#Off Campus



Although off-campus trips to restaurants and stores are currently restricted, students are allowed to participate in outdoor activities. In these photos, students enjoy hiking nearby areas, a drive-in movie, and watching the balloon festival.

#Extended Weekends

We realize a boarding school is a unique situation where you basically live and work in the same place. Once a month, students get at least a 4-day weekend and often get a full week. The long weekends are in September and October then November break is a full week. Winter Vacation is three weeks, then J-Term, then a full week in February, a long weekend in March, a full week in April, then the final stretch until graduation. Extended weekends, and full weeks, give the students a chance to go home and connect with their families and local community.



The four downstate buses line up going as far as Westbrook.



When they return late Tuesday, there is dinner in the dorm.



#RI Activities



Mr. Dougeneck made a secret family recipe for pudding with sliced apples. It was popular and he ran out of pudding. Some students even offered to lick the bowl clean.



Señora Carson's Arts & Crafts Night's October activity was mask making.

Other, photographically unattractive, events include movies in the gym (with popcorn) and Pokemon Go off campus trips. The only time the dorm is boring is when you want it to be. Weeknights after structured study and on weekends there are plenty of activities to choose.

#Open House



Admission's Janet Scott & Executive Director Sam Critchlow ('01)



Science Dept. Chair
Dr. Debbie Eustis-Grandy



Director of Residential Life, Matt Bartlett



Student Panel (Back L-R) Hadley Blodgett, Oliver Sites,
(Front L-R) Greyson Orne, Melanie Lau



College Counselor, Erica Jortberg & Mr. Critchlow



Dean of Enrollment Management
Mr. Alan Whittemore (now retired)

#Alumni Spotlight

MSSM is always delighted when one of its alum comes to visit. Jason Dark ('04) not only came to visit, but also gave a presentation to Mr. Rhodes' Linear Algebra class. He talked about "Mathematical Models of Prion Protein Pathogenesis in *S. cerevisiae*", a subject he developed for his thesis, to a class of junior and senior students. At lunch, Jason had a general information session with students about life at MSSM while he was here and what he has achieved afterwards.

When asked about what has and hasn't changed, Dark said, "The conversations, questions, and the intellectual curiosity and the engagement. I felt like this was 20 years ago, it was amazing. The excitement and enthusiasm and capability of the student body was incredible. The questions I received today during my talk, were much better than I received doing that exact same presentation in grad school. They were very thoughtful and well-reasoned."



Sam Critchlow ('01) & Dr. Jason (Davis) Dark ('04)

The coolest thing I have seen here now is the makerspace. We didn't have that much opportunity to explore all the different engineering things when I was here. So, it's just amazing to see robotics and the telescopes and rockets and all the computing equipment. Then there's the greenhouse outback and that's just cool. These kids are so lucky that they can explore all these areas at this level. Most of the time you have to wait until you get to college to have access to all this, but they get a head start on that.

Jason is from Bridgewater, Maine, in Aroostook County. Upon graduation from MSSM, he went to Brown University and received an undergraduate degree in mathematics while also fulfilling the requirements for an Education Degree. Upon graduation from Brown, Jason worked for the Scientific Research Department of the US Air Force and, while working, achieved a Master's Degree in Applied Mathematics and Statistics from Georgetown University. Since then, Jason achieved his doctorate in Applied Mathematics from the University of California-Merced. He now works as Chief Technical Officer for Tremor Technologies, Inc.



#Interim Executive Director

In August, the Maine School of Science and Mathematics (MSSM) began classes in its 27th school year. The public, residential magnet school, free of tuition for Maine residents, was last ranked by U.S. News and World Reports as the #1 high school in Maine and #2 high school in the nation (2019). This year's student body draws from all sixteen counties of Maine, and includes a small number of tuition-paying out-of-state students. Students arrived via a staggered schedule starting August 19th. This past week marks the first time since spring 2020 that all students are on campus at the same time.

Sam Critchlow, an alumnus of MSSM, is the school's new interim Executive Director. After graduating from MSSM in 2001, Critchlow attended Amherst College and the University of New Hampshire. He returns to the state following 14 years as a mathematics teacher and school leader at schools in the Rocky Mountains and northern New England, serving most recently as the founding Head of School at Bozeman Field School in Montana, and teaching at Montana State University. Critchlow, who grew up on Peaks Island, said the following of his return: "It's wonderful being back in Maine, and returning to a school that made an incredible impact on my life. The students, faculty, and staff represent some of the strongest talent in the state, and it's a pleasure to serve them."

The school shares an academic building with Limestone Community School, the first school in the state to open remotely. MSSM's extensive COVID-response plan includes:

- mandatory masking in indoor spaces
- a recent negative COVID test required prior to student arrival
- daily symptom checks before class
- weekly pooled testing
- limited off-campus activities
- Due to the strict standards and high vaccination rates among students and staff (both above 90%), MSSM has thus far avoided some of the pitfalls affecting surrounding schools and communities.

Critchlow reports: "Parents and students are eager for a safe start to the school year, as well as a science-based approach in how we respond to COVID. With cases emerging in the surrounding area this week, we have enacted extra measures to insulate our community. We want what all schools want: a smooth year of in-person learning."



#Stay Connected

Social Media



facebook.com/MSSM.org



[@mssmpenguins](https://www.instagram.com/mssmpenguins)



www.linkedin.com/in/maine-school-of-science-and-mathematics-25285913b/

Clickable Link

Request For Media

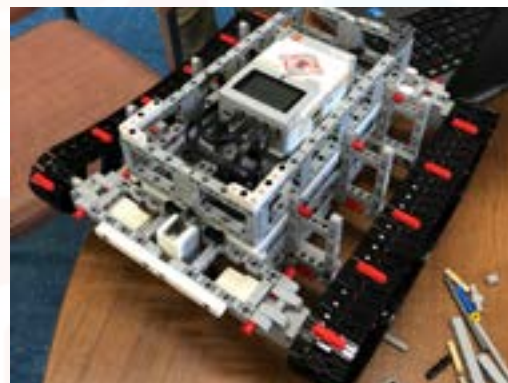
If your child has done / does / will do something away from school that would be of interest to us, please let us know. Email media@mssm.org

Student-Made Videos

Clickable Link

<https://www.mssm.org/admission/why-mssm>

MSSM STEM Summer Camp *For ages 10-14*



www.MSSM.org/summer

Boys' Week 1 - June 26 - July 2

Boys' Week 2 - July 3 - July 9

Girls' Week 1 - July 10 - July 16

Girls' Week 2 - July 17 - 23

The classes are what set us apart from other summer camps. We don't have archery or canoeing, but we keep kids academically stimulated during the summer. Our classes have no grades or homework and kids don't need to know anything about the topic to enjoy it.