

Montana Aerospace Scholars
Montana Learning Center at Canyon Ferry Lake

Freshmen & Sophomore Program

What is Montana Aerospace Scholars (MAS)?

MAS is a two-part course on Earth and Space Science. It covers the history and future of NASA space exploration for Montana high school freshman and sophomores. Phase One is a six-week online course offered in partnership with NASA, the University of Washington (UW), and the Montana Learning Center (MLC); Phase Two is a three-day residency based program at the MLC.

Who is eligible?

Applicants must be Montana residents in their freshman or sophomore year of high school. Acceptance is based on student interest with a completed application. There are no math or science requirements, but experience in pre-algebra and essay writing is helpful.

What's the difference between Phase One and Phase Two?

Phase One is a six-week, online course designed by NASA and consists of three online lessons. The curriculum is focused on NASA history, Earth and Space Sciences.

Successful completion of Phase One qualifies students for Phase Two, a three-day Summer Residency program at the MLC. There, students have the opportunity to discover Montana's aerospace industry through behind-the-scenes aerospace company tours and presentations from leading STEM experts. Participants can also informally network with STEM professionals and connect with like-minded peers during the engineering challenges and team building activities.

When does Phase One begin?

Enrolled students have access to the course website starting Tuesday, April 4, 2023. After an introductory activity, lessons are due every other Tuesday at 11:55 p.m.

Will I get a grade on my high school transcript?

Your performance in MAS will not be shared with anyone, and it will not be reported to your high school or appear on your transcript. Upon successful completion of the MAS Freshman/Sophomore program, coursework can be applied to the MAS Junior/Senior program. This course could also be shared and highlighted on a student resume.

What is the schedule?

Students complete the online lessons at their own pace. When a lesson opens, all activities for that lesson are available and students can set their own schedule. The key to success is finding a schedule that works to complete all activities by the biweekly Tuesday, 11:55 pm deadlines. At the start of the course, students will receive a detailed schedule of deadlines and activity requirements. Lessons are made available every two weeks from early April to mid-May.

Who evaluates my online work? Where can I find help?

Certified STEM teachers evaluate all Phase One work, and each student is assigned to an Online Academic Evaluator (OAE) to provide detailed feedback and help for the duration of the course. Grading rubrics outline how students will be evaluated. Students can seek help from their OAE or their high school teachers.

What kind of work is required?

Each lesson consists of:

- Reading chapters and quiz (about 20-25 pages of online material);
- A 500-word essay (based on a topic related to the reading material);
- Space-related math problems (word problems with some algebraic thinking).
- Lessons may also contain: online forums, virtual lab activities, and graphic design.

How long will each Phase One activity take?

Students will need to commit 15-20 hours every two weeks for each lesson. Creating a weekly schedule can help with time management.

What if I miss a deadline?

MAS understands many things can prevent students from meeting deadlines, so we allow students to turn in activities late. Students always receive some credit for work they submitted but they will have a small percent deducted from their grade for late work.

How are students selected for the Summer Residency?

To qualify for Phase Two, students will have completed all of their online activities, consistently submitted quality work, and will have earned a “C” or higher in the Phase One course. Students are notified after completion of the course in mid-May if they are selected for the Summer Residency.

When is Summer Residency?

Wednesday, July 5th through Friday, July 7th, 2023

What are the benefits of being a MAS alumni?

Once you are a MAS alumni, you join an elite group of students who are eligible for select scholarships and unique leadership and educational opportunities through the MLC. MAS alumni attend top-tier colleges and universities nationwide, and many of our scholars student alumni are currently working at leading aerospace and STEM companies around the world.

What is the cost to participate?

There is no cost to participate in the freshman or sophomore MAS program! Funding is provided by the Northwest Earth & Space Science Pathways program and the MLC. Students must make their own travel arrangements to and from Helena for the residency, but help is available if needed.

Still have questions?

Contact Program Director Ryan Hannahoe at MontanaLearningCenter@gmail.com.