

GIRLS ON ROCK: SCIENCE, ART AND WILDERNESS SKILLS - MICRO-CREDENTIAL

Girls* on Rock is a 12-day rock climbing and wilderness expedition for high school youth. Learners engage in scientific inquiry and artistic exploration while camping, hiking and rock climbing in the Rocky Mountains. In small groups, participants conduct research projects and present their findings. Throughout the expedition, participants engage in various art forms and storytelling. Learners demonstrate numerous leadership and wilderness skills. Evidence required to earn micro-credential includes research presentation, self-reflection, and skills checklist. Girls* on Rock accepts all cisgender girls and transgender, agender, Two Spirit, nonbinary, intersex and genderqueer youth.

Eligibility

The Girls* on Rock program is only open to high school girls. We recruit participants who come from backgrounds traditionally underrepresented in the geosciences, including girls of color, economically disadvantaged girls, and LGBTQ+ girls.

Delivery Mode

In-person.

Credit Status

Noncredit.

Academic Level

Other.

Time to Completion

Twelve days.

Requirements

- Demonstrate wilderness skills by spending 12 days/nights camping, hiking and climbing with the Girls* on Rock expedition team.
- Demonstrate successful leadership and personal growth throughout the expedition.
- Work in a small group to design and implement an experiment in a wilderness environment and present on findings.
- Explore a variety of art forms and storytelling methods and discuss and reflect on different ways of knowing.

Criteria

- **Demonstrate wilderness skills while spending 12 days camping, hiking and climbing with the expedition team.**
This includes safely and correctly setting up camp gear including tents, stoves and water purification methods; safely using ropes, harnesses and belay devices to climb and descend vertical rock in a way that mitigates risk; practicing leave-no-trace principles; and practicing hygiene and self-care in a wilderness environment
- **Demonstrate successful leadership and personal growth throughout the expedition.**
This includes fulfilling various leadership roles in camp and demonstrating knowledge of when to step up and when to step back,

evaluating self-status and needs, communicating and advocating for personal needs; explaining and reflecting on different communication styles and modes, and describing and applying strategies for effectively resolving conflicts

- **Work in a small group to conduct an experiment in the field and present findings.**

This includes asking questions based on observations; formulating a testable hypothesis; designing and implementing a process to collect the data needed to test the hypothesis; recording systematic observations of natural phenomena in a field notebook; analyzing and synthesizing data; and presenting the research findings including introduction, methods, results, conclusion and discussion

- **Explore a variety of art forms and storytelling methods and discuss and reflect on different ways of knowing.**

Learners will individually complete a self-assessment, and submit a skills checklist and their research presentation to demonstrate their learning.

Skills

- Collaboration & teamwork
- Conflict resolution
- Creativity
- Critical thinking
- Develop and deliver a brief presentation
- Develop a research study methodology
- Draw conclusions
- Identify a research question
- Independence
- Interpret data
- Leadership
- Organization
- Persistence
- Personal responsibility
- Problem-solving