**Goals for the Orientation**

- Clarify my expectations and the students’ expectations.
- Help students develop a sense of excitement about their research and get hands-on with their research project as soon as possible.
- Jumpstart friendly relations between students and with their mentors and solidify teams.
- Foster inclusion and respect.
- Give students a sense of the importance of this experience and of their taking a place in the science community.
- Get students set up in housing, laboratory, campus, city.
- Help students love Minneapolis (or Duluth, or Pablo)
- Begin Ethics in Research discussion.
- Introduce important REU concepts: Community-Based Participatory Research, Traditional Ecological Knowledge, Indigenous Research Methodology, Team Science.
- Support students’ research/writing skills.

**Orientation Activities**

- Discussion of program expectations
- Ethics activity
- Tour of campus
- Lab tours
- City tour
- Picnic with mentors
- Safety training
- Technology training
- Team Building Activities
- Talking Circles: What is your culture or community? What do you bring to the REU?
- Introduction to REU thematic elements
- Introduction to Bibliographic Software
- Library training
- Meet mentors and begin formalizing research projects
- Hands-on lab activity
- Lab barbecue
- Intro to videoconferencing with other teams

**ABSTRACT**

Running a Research Experience for Undergraduates (REU) Site takes purposeful planning and experimentation if you want to provide students with an excellent and motivating research experience. The REU on Sustainable Land and Water Resources, which has been in operation since 2010, works to push the boundaries of how an REU can be conducted to maximize student excitement, engagement, and success. In particular, the PIs place emphasis on a well-planned Orientation and final All-Team Gathering as a way of “bookending” the summer experience with positive development activities. These activities are specifically linked to goals the PIs have for the beginning and end of the REU.

**Goals for the All-Team Gathering**

- Allow all three teams with their mentors to come together and get to know one another.
- Give and receive feedback on the summer.
- Honor the students’ hard work and give them respect for a job well done.
- Get other researchers to give students feedback on their projects.
- Provide meaningful field trip experiences that will allow students to take away a positive memory of Minnesota.
- Give students a sense of the importance of this experience and of their taking a place in the science community.
- Celebrate successes.
- Continue Ethics in Research discussion.
- Reinforce important REU concepts: Community-Based Participatory Research, Traditional Ecological Knowledge, Indigenous Research Methodology, Team Science.
- Support students’ presentation skills.

**Bridging Activities**

- Weekly videoconferences
- Weekly team meetings with PI
- Field trip
- Weekly blogging
- Lunch with faculty at SAFL and CEGE

**All-Team Gathering Activities**

- Family and mentor welcoming picnic w fire circle
- Ice-breaker activities
- Poster run through--project posters and have each student present their work to other students
- Talking circles: What are you taking back home with you from this experience to share with your community?
- Revisiting community-based participatory learning via mapping activity
- Field trip to the Fond du Lac Band of Lake Superior Chippewa to see the wild rice lakes and Lake Superior
- Geology field trip to Taylor’s Falls
- Trip to the Science Museum of Minnesota to see the NCED-created Big Backyard
- Poster session at St. Anthony Falls Laboratory in conjunction with the Summer Institute on Earth-surface Dynamics
- Awards Banquet

**Our Partners**

REUSLAWR institutional partners include University of Minnesota Twin Cities and Duluth (including the St. Anthony Falls Laboratory), The National Lacustrine Core Facility--LacCore, and the UMD Dept. of Earth and Environmental Sciences, Fond du Lac Tribal and Community College, Fond du Lac Band of Lake Superior Chippewa, the Leech Lake Tribal College, Salish Kootenai College and the Confederated Salish and Kootenai Tribes.