

# AguaClara Course Descriptions

## Participating in AguaClara for Course Credit

The research, invention, and design project courses specific to AguaClara are focused on developing technology that can be used to improve the drinking water quality of surface water sources in the Global South. The program is structured to allow students with different levels of expertise to collaborate, share knowledge, and create new knowledge. Because the need for clean water is urgent and the cost of implementing the technology is minimal, the development effort includes multiple tracks.

The project tasks evolve from semester to semester as we develop sustainable water treatment technologies. We also encourage students to participate in the program for multiple semesters so there is continuity of team members to aid in the transfer of knowledge from semester to semester. Following graduation, students also have the ability to become involved directly in implementation as an [AguaClara Engineer](#)

## AguaClara Course Options

### CEE 2550: AguaClara: Sustainable Water Supply Project

- CEE 2550 is normally the first AguaClara course taken and is open to all students who do not meet the prerequisites for 4550. CEE 2550 is also the course for students who are working on the Outreach team. You will not be expected to fill a leadership role and are not required to enroll in the technical theory class.

### CEE 4540: Sustainable Municipal Drinking Water Treatment

- [CEE 4540](#) is a pre/corequisite for the main AguaClara project course, CEE 4550. It is the technical, theory course that develops the base of water treatment knowledge used in our research and design. CEE 4540 is also a capstone design course for Environmental Engineering.

### CEE 4550: AguaClara: Sustainable Water Supply Project

- CEE 4550 is the main AguaClara project course and must be taken for 3 credits. It fulfills the requirements for a design course. You must (be enrolled in or have taken CEE 4540 to enroll in CEE 4550) . You may be requested to have a leadership role within the team.

### CEE 5051-5052: AguaClara: Sustainable Water Supply Project

- CEE 5051-5052 are the graduate level versions of CEE 4550.

### CEE 3090

- CEE 3090 is a special topics course. It can be taken by students who are continuing on with AguaClara work after CEE 4550 as a major approved elective (with petition).

### CEE 4010 Experience in Undergraduate Education: Section on Agile Leadership for Innovation

- CEE 4010 is for AguaClara team leaders and research advisors.

## Technical Communications Credit

- A limited number of students can petition Monroe to receive credit for technical communications through the AguaClara program. To be eligible the student must select a writing or communication project that is in addition to the requirements for the AguaClara project course. Examples of projects include writing EPA P3 proposals, publishing a paper based on team research, creating a brochure, or crafting a slide deck for a pitch to supporters.
- Students must write a proposal for the technical communications credit and include 2 draft submissions prior to delivering the final work. Most projects can be completed in the normal semester timeframe. EPA P3 proposals must comply with EPA requirements for submission deadlines.

## Class Conflict Policy

If you are a new member on the AguaClara team, you will not be permitted to enroll in the course unless you can attend the lecture and laboratory sections.

Preference during recruitment and team sort will be given to those students who are able to attend lecture and laboratory sections.

The expectation is that all students will be putting in 10 hours a week.

## International Student Research Internships

The [PIRIP](#) program allows qualified non-degree undergraduate and graduate students from abroad to conduct research on campus for periods up to six months with their tuition covered by a Provost's Fellowship. An administrative fee is charged.

## Other Relevant Courses

Many of these courses fulfill engineering liberal arts requirements.

- [Latin American Studies Program](#)
- [Department of City and Regional Planning](#)

- Department of Developmental Sociology
- Department of Communications
- Applied Economics and Management
- International Agriculture and Rural Development