## **Faculty Member Contact Information**

Name	Edward Navarre
Contact Info	
SIUE Email	enavarr@siue.edu
Campus Box	1652
Department	Chemistry

### 1 Funded, 1 Unfunded URCA Assistant

	This position is <b>ONLY</b> open to students who have declared a major in this discipline.	M
<b>/</b>	This project deals with social justice issues.	•
<b>✓</b>	This project deals with sustainability (green) issues.	
	This project deals with human health and wellness issues.	+
	This project deals with community outreach.	*
	This mentor's project is interdisciplinary in nature.	I

Are you willing to work with students from outside of your discipline? If yes, which other disciplines?

Yes

How many hours per week will your student(s) be required to work in this position? (Minimum is 6 hours per week; typical is 9)

7

Will it be possible for your student(s) to earn course credit?

Yes CHEM 296 or 396 or 496 0 or 1 or 2

**Location of research/creative activities:** 

### Brief description of the nature of the research/creative activity?

The project is the development of a low-cost, compact spectrophotometer that would make accurate chemical measurements more economically accessible. We are in the stage of demonstrating the quality of measurements made by the device and comparing the results to a commercial instrument. The experiments will utilize spectrophotometric (light absorption) methods for commonly studied chemicals. This is an opportunity to see how an instrument becomes validated for use by a broader audience.

#### **Brief description of student responsibilities?**

The student will be responsible for conducting the experiments, including preparation of standards and samples, performing measurements, and data analysis. Basic statistical analysis of data quality is also expected. Existing methods of analysis will be used. The student will write a summary report and participate in the writing of any peer-reviewed outcomes or reports to collaborators.

URCA Assistant positions are designed to provide students with *research or creative* activities experience. As such, there should be measurable, appropriate outcome goals. What exactly should your student(s) have learned by the end of this experience?

Yes

# **Requirements of Students**

If the position(s) require students to be available at certain times each week (as opposed to them being able to set their own hours) please indicate all required days and times:

If the location of the research/creative activities involves off campus work, must students provide their own transportation?

Must students have taken any prerequisite classes? Please list classes and preferred grades:

Preference will be given to students who are enrolled in or have completed CHEM 331.

Other requirements or notes to applicants: