

## **Honors Contract Proposal Example: Environmental Science**

### **HONORS CONTRACT PROPOSAL COURSE INFORMATION**

**COURSE:** GLY 4071C, Paleoclimatology

### **HONORS CONTRACT PROPOSAL**

#### **PROVIDE A TITLE FOR YOUR HONORS COLLEGE CONTRACT PROJECT**

Experimental Design for Analysis of K. Brevis Mobilization within Sediment

#### **EXPECTED ATTRIBUTES & OUTCOMES**

Field-based application of course content/concept, Increased depth, scope, and/or rigor of existing course assignment, Increased interaction between student and instructor, Performance (research, writing, creativity, and/or synthesis) at an advanced level

#### **RESPONSIBILITIES & OPPORTUNITIES**

The student will be responsible for compiling a literature review to determine the efficacy of finding K. Brevis (red tide) sedimentation in chronological sediment cores. Once it is determined (or not) that evidence of historical K. Brevis blooms could be stored in coastal sediments, the student will design experimental procedures to take advantage of such information. The purpose of the experimental procedure writing is to give a starting point for data collection concerning the location, extent, and intensity of historical red tide blooms. Once procedures have been reviewed and approved by the supervising professor, a presentation could be to present either to other classmates or to researchers that may be able to employ the procedures.

#### **WHAT WILL THE STUDENT LEARN (LEARNING OUTCOMES) AS A RESULT OF THIS HONORS CONTRACT?**

The student will learn to create new opportunities for research and employ scientific method to ensure quality data collection. The student will also learn to conduct research to support his experimental procedure and be able to communicate the results of that research to advance scientific knowledge.

#### **NOT INCLUDING COURSE MATERIALS (SUCH AS TEXTBOOKS), WHAT ADDITIONAL RESOURCES WILL BE USED TO COMPLETE THE PROJECT?**

Little or no outside resources may be needed for this project. However, if the experimental procedures were to be confirmed in practice, an apparatus to test hydraulic conductivity may be required.

#### **HONORS CONTRACT TIMELINE**

By February 7 - Complete initial literature review to determine if experimental procedures may be feasible.

February 7 - Meet with professor to discuss findings of literature review and possible experimental procedures.

By February 28 - Complete first draft of experimental procedures, seek review from professors in engineering and environmental science to confirm procedure integrity.

February 28 - Meet with professor to edit experimental procedures if needed.

By March 12 - Finalize experimental procedures if possible.

March 12 - Meet with professor to confirm finalization of experimental procedures and discuss forum/media/audience for potential presentation.

March 26 - Complete presentation of experimental procedures and look into possible presentation opportunities.

By April 17 - Have presented experimental procedures to applicable audience if possible.

**DESCRIBE THE FINAL PROJECT, WHICH SHOULD BE SEPARATE AND DISTINCT FROM THE COURSE ASSESSMENTS. THE RESULT OF A SUCCESSFUL CONTRACT SHOULD BE TANGIBLE.**

The final project will include the following:

Literature review to determine probability of experimental procedure.

Written experimental procedure to test mobility of K. Brevis in sediment, if revealed as feasible by literature review.

Final presentation of experimental procedure in visual/oral form to an applicable audience.