

UCF NSSE Workgroup: Numeracy

Refined Problem Statement

UCF students need to learn quantitative methods and to apply mathematical concepts to solve real life problems (word problems) across all disciplines.

Objectives

1. To graduate citizens who can make numeracy informed decisions in their careers, everyday lives, and society.
2. All faculty and students will embrace a culture of numeracy (including common values, common language, and an emphasis on word problems).
3. To graduate more students in the sciences and engineering with a higher level of numerical competence, appropriate to their disciplines.
4. Graduates of UCF will be able to discriminate between good and poor information.

Potential Solutions and Implementation Strategies

1. Institutional competencies and standards that can be assessed for all students.
 - a. Each program that has courses with multiple sessions will have a coordinator for each course.
2. Create a center for numeracy that can offer units in practical numeracy, as well as possible remedial math classes.
 - a. Classes could include “refresher” courses for specific programs or departments.
3. Develop a set of tutorials to be available on an as needed basis (may be delivered via web). This may include a more formal tutoring program.
4. Each program will examine its curriculum with an eye to interdisciplinary numeracy opportunities. This will include the courses that comprise Gen. Ed.

Key Personnel

Subir Bose (Physics)
General Education faculty
Departmental program coordinators

Projected Timeline

Resources

New faculty hires with interdisciplinary expertise
Salary compensation for faculty involved in the coordination of this project
Possible computer lab or computation lab
Faculty development

Assessment

Consider existing standardized tests of analytical skills (e.g. RAND test).