

OPTION E 1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS

One row was filled in, for the one program in mathematics:

BACHELOR OF SCIENCE IN MATHEMATICS

Working across the row:

**1. Have formal learning outcomes been developed?**

Yes.

**2. Where are these learning outcomes published?**

Learning outcomes for mathematics majors are published on page 85 of the 2009-2010 Undergraduate Catalogue for Johnson State College, and also online at <http://www.jsc.edu/Academics/CourseCatalogues/2009UGradCatalogue/index.htm>; click on the “Department of Mathematics” tab in the left margin.

**3. Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?**

The Mathematics Department utilizes a mid-career Core Assessment Exam score to gauge student proficiency in our core curriculum (outcomes #1 and #2). All students complete a capstone Senior Project; the resulting presentation provides evidence of student mastery of the learning outcomes (#1 through #6).

**4. Who interprets the evidence? What is the process?**

All three full-time mathematics faculty members grade the Core Assessment Exam. Typically, all three full-time faculty members observe the Senior Project Presentation. A “checklist” form allows each observer to rate (on a scale of 1 to 5) how well the presentation provides evidence of student mastery of the various outcomes. Student performance (capstone presentation) is discussed among all full-time mathematics faculty members. Copies of the forms are kept on file with the Department Chair.

**5. What changes have been made as a result of using the data/evidence?**

There have been no major curricular changes to date. However, observed results on the Core Assessment Exam have led to changes in its format. Specifically, poor results have indicated deficiencies in the structure of earlier versions of the exam (and not necessarily a failure of students to master the learning outcomes).

**6. Date of most recent program review.**

VSC Policy 101, Fall 2006