

# COLLEGE ACTION PLANS

## REQUIRED TUTORING

### Purpose

Improve the success rates of students in high-risk math courses.

### Goals

The goal of required tutoring is to increase student Productive Grade Rate (PGR).

### Measures

In spring 2017:

- MATH 0320 16-week sections will have a PGR increase from 52.7%\* to 54.7%.
- MATH 2412 16-week sections will have a PGR increase from 69.6%\* to 72.6%.

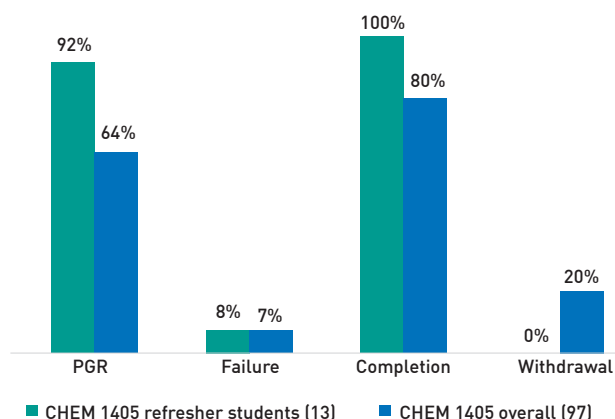
\*Baseline data for spring 2016 PGR is from 16-week classes.

### Next Steps

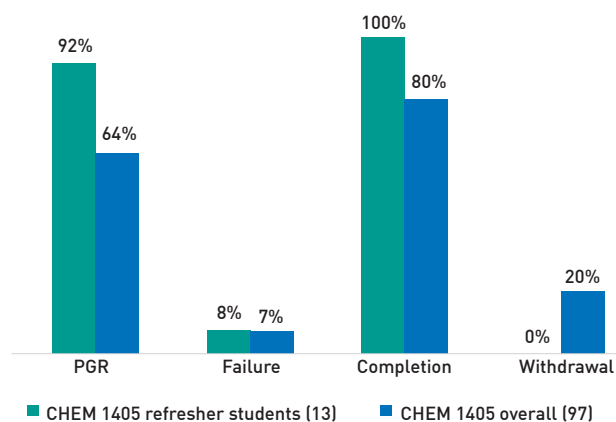
Much of this CAP has been largely institutionalized—for several courses, all sections have required tutoring. Therefore, we propose to change the focus of the CAP to voluntary refreshers for high-risk courses.

For the fall 2016 semester, the Science Learning Center began offering voluntary refresher courses for students enrolled in CHEM 1405 and CHEM 1411. This was because students were struggling with the math portion of the courses and would get behind within the first few weeks of class. Results were promising.

### CHEM 1405 Refresher, Fall 2016



### CHEM 1411 Refresher, Fall 2016



Starting in fall 2017, voluntary refreshers will be offered for:

- BIOL 2401 (Human A&P I), one 2-3 hour session on vocabulary
- CHEM 1405/1411 (Introductory Chemistry I and General Chemistry I), continue offering one 2-hour session on math concepts needed for the course
- MATH 1314/1414 (College Algebra and STEM College Algebra), two 2-hour sessions on factoring, simplifying rational expressions, and graphing
- Math 1442 (Elementary Statistical Methods), two 2-hour sessions on vocabulary, word problems, and calculator use

Students who receive the refreshers will have 4% higher PGR and within-term retention than their peers. If most attendees have significantly higher PGR, all students in these classes will be provided a mandatory refresher (starting in the fall 2018 semester).

### Timeline

- **Spring 2017**
  - » The Math and Science Learning Center Specialists will work with faculty to create content for voluntary refreshers.
- **Summer 2017**
  - » Refreshers will be offered two weeks before the beginning of the fall semester.
- **Spring 2018**
  - » Evaluate PGR and within-term retention of students who received refreshers.
  - » Determine which courses will have mandatory refreshers (starting fall 2018).
  - » Revise content as necessary.
- **Summer 2018**
  - » Provide mandatory refreshers two weeks before the beginning of the fall semester.