

## Master Syllabus

### OPT 2780 - Operations Technology Capstone

**Division:** Science, Mathematics and Engineering

**Department:** Operations Technology

**Credit Hour Total:** 3.0

**Lecture Hrs:** 3.0

**Other Prerequisite(s):** Approval of Department

**Date Revised:** October 2012

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#### Course Description:

Assessment of achievement by Operations Technology students in attaining program-related outcomes by completing a project demonstrating principles and practices of the major.

#### General Education Outcomes:

- Critical Thinking/Problem Solving Competency

#### Course Outcomes:

##### Technical Skills and Knowledge

Demonstrate the ability to transfer technical skills and knowledge to real-world situations.

**Assessment Method:** Portfolios

**Performance Criteria:** Analysis of capstone portfolio indicates "competent" performance or better on the portfolio rubric by 80% of the students.

##### Complex Operations Problems

Demonstrate the ability to solve complex operations problems, drawing upon a breadth of operations technology competencies.

**Assessment Method:** Portfolios

**Performance Criteria:** Analysis of capstone portfolio indicates "competent" performance or better on the portfolio rubric by 80% of students.

##### Engineering Techniques

Apply appropriate engineering techniques in an open-ended environment.

**Assessment Method:** Portfolios

**Performance Criteria:** Analysis of capstone portfolio indicates "competent" performance or better on the portfolio rubric by 80% of the students.

##### Solutions to Technical Issues

Identify, justify and communicate solutions to technical issues.

**Assessment Method:** Portfolios

**Performance Criteria:** Analysis of capstone portfolio indicates "competent" performance or better on the portfolio rubric demonstrated by 80% of students.

#### Outline:

Student organization meeting to explain courses purpose, schedule, rules and expectations

Students (individually or in teams, it depends on the size and scope of the project) and faculty meet with the project sponsors

Students and sponsors develop project description, including end of the project deliverables

Students work on their project at the sponsors location

Midterm progress report sent to faculty and sponsor by students

Project completed, a written report and Power Point presentation is developed

Final presentation to the sponsor and faculty, report and copy of the presentation is submitted