REGULAR COURSE SYLLABUS

School of: Professional Studies

Department: Engineering Technology

Prefix & Course Number: MET 4100 Crosslisted With*: ___

Course Title: Senior Project I

Banner course title (13 characters): Senior Project I

Check All That Apply: Required for Major: X Required for Minor: ___ Specified Elective: ___ Required for Concentration: ___ Elective: ___ Service Course: ___

To receive Title IV financial aid funds, all institutions of higher education must comply with the federal definition of a credit hour. The Higher Learning Commission requires institutions to maintain policies and procedures for verifying compliance with this definition.

Federal Credit Hour Definition: A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally-established equivalency that reasonably approximates not less than:
(1) one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or (2) at least an equivalent amount of work as required in paragraph (1) of this definition for other activities as established by an institution, including laboratory work, internships, practica, studio work, and other academic work leading toward the award of credit hours. 34CFR 600.2 (11/1/2010)

Credit Hours: 1 (.5+1)

Face-to-Face or Equivalent Hours per course:
- Lecture 7.5
- Lab 1.5
- Internship ___ Practicum ___ Other (Interface with project sponsors) ___
- hours: 30

Additional Student Work Hours per course: 30

Schedule Type: B Grade Mode: L

Variable topics umbrella course: No X Yes ___ If Yes, number of credit hours allowed ___

Specified repeatable course: No X Yes ___

APPROVED:

[Signature] Date 01/29/2014

Department Chair OR Program Director

[Signature] Date 1/38/14

Dean OR Associate Dean

[Signature] Date 03/13/14

Associate VP, Academic and Student Affairs

*If crosslisted, attach completed Course Crosslisting Agreement Form
Prefix and Course Number: MET 4100

Prerequisite(s): CET 3135, COM 2610, and MTH 2420, with grades of "C" or better, senior standing

Corequisite(s): 

Prerequisite(s) or Corequisite(s): MET 3070 or MET 3000, and EET 2000, with grades of "C" or better

Banner Enforced:
Prerequisite(s): CET 3135, COM 2610, and MTH 2420, with grades of "C" or better and senior standing
Corequisite(s): 
Prerequisite(s) or Corequisite(s): MET 3070 or MET 3000, and EET 2000, with grades of "C" or better

Registration restrictions: Level Senior Class Program/Major Student attribute

Catalog Course Description:
In this course, students are required to work on the planning and designing of a team project in consultation with faculty advisors and industry contacts. (Senior Experience)

Specific Variable Topics Course Description (if applicable, umbrella course description included above):

Required Reading and Other Materials will be equivalent to:
Handouts

Specific, Measurable Student Behavioral Learning Objectives:
Upon completion of this course the student should be able to:
1. Integrate and incorporate the knowledge gained in the MET curriculum in a culminating project.
2. Identify, formulate, analyze, design, and solve a technology-based project.
3. Form multidisciplinary teams and function as a valuable team-member by understanding professional, ethical, social, and contemporary issues.
4. Plan and deliver a formal presentation of the project technology, projected cost and implementation.

Detailed Outline of Course Content (Major Topics and Subtopics) or Outline of Field Experience/Internship (experience, responsibilities and supervision):
I. Orientation
   A. Goal of Course
      1. Identify projects suitable for the level of students
      2. Create Functional Specifications
      3. Develop Preliminary Design and Deliverables
      4. Develop a Plan for Completing the Project
      5. Conduct Financial Analysis
   B. Criteria in Project Selection
   C. Research Methods and References
II. Select a Project
III. Develop a Project Plan
   A. Tasks
   B. Milestones
   C. Materials
   D. Costs

IV. Preliminary Design Work on Project

V. Presentation of Preliminary Design involving Industry Members

**Evaluation of Student Performance:**
1. Written Project Proposal in Terms of Technology, Plan, and Costs
2. Formal Presentation
REQUEST FOR NEW OR CONTINUED SENIOR EXPERIENCE DESIGNATION

(Senior Experience)

(To accompany old and new regular syllabus form and Curriculum Change Proposal forms)

Date: October 4, 2013
School: School of Professional Studies
Department: Engineering Technology

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<tr>
<th>Prefix</th>
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<th>Credit Hours</th>
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Title: Senior Project I (0+2)

Prerequisites: Satisfaction of all Level I and Level II General Studies course requirements with a cumulative GPA of 2.0; and senior standing

Corequisites: MET3070, MET3210 or MET3000, MET3330 and EET2000

Recommended maximum enrollment per section: 15

Current Course Status (check all that apply)
☑ New course
☐ Existing Senior Experience Course

Criteria for Senior Experience

The following criteria must be addressed for all courses seeking Senior Experience designation. Please type on this form; it will expand to accommodate any length of text.

The Senior Experience must allow students to:

1. synthesize learning through critical analysis and logical thinking.
   The student in MET 4100 is given the goals and criteria of the course. In consultation with the faculty member the student selects and plans a design project.

2. apply theoretical constructs to practical applications.
   The students perform preliminary design work on the design project demonstrating analysis and synthesis of skills learned as a major. (Subsequent completion of the design and construction of the project occur in the companion course MET 4110). The students will do the work in groups or independently, with the faculty member acting as a consultant.
3. critique philosophical tenets and current practices.
   Students are required to research current industry design methods and reference them in the final
   written technical report.

4. integrate and refine oral and/or written communication skills.
   The student must complete a written design proposal and give a formal presentation of the proposal.

5. verify their expertise.
   The final assignment is a written technical report and presentation on the preliminary design.

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Approvals:

Department Curriculum Committee / Date

Department Chair OR Program Director/ Date

School Curriculum Committee / Date

Dean or Associate Dean / Date

Chair, Faculty Senate Curriculum Committee / Date

Associate Vice President, Academic Affairs/Date