REGULAR COURSE SYLLABUS

School of: Professional Studies
Department: Engineering Technology
CIP Code: 15.0201
Prefix & Course Number: CET 4410 Crosslisted With*: ______
Course Title: Steel Design II
Check All That Apply: Required for Major: _____ Required for Minor: _____ Specified Elective: X
Required for Concentration: X Elective: X Service Course: ______
Credit Hours: 3 (3+0)
Total Contact Hours per semester (assuming 15-16 week semester):
  Lecture 45 Lab 0 Internship 0 Practicum 0 Other (please specify type and hours):_____
Schedule Type(s): L Grading Mode(s): L
Variable Topics Courses (list restrictions, including the maximum number of hours that can be earned**):
** NOTE: This information must be included in the course description.
Restrictions (Variable Topics Course): ______
Prerequisite(s): CET 4400 with a grade of "C" or better; or permission of instructor
Corequisite(s): None
Prerequisite(s) or Corequisite(s): ______
Banner Enforced: Prerequisite(s): ______ Corequisite(s): ______
Prerequisite(s) or Corequisite(s): ______
Catalog Course Description:
This course is a continuation of the fundamentals introduced in Steel Design I, with emphasis on the analysis and
design of structural steel connections, based on the latest AISC design requirements and specifications for
structural steel.

APPROVED: ___________________________  3/11/08
Department Chair OR Program Director ___________________________  4/8/08
Dean OR Associate Dean ___________________________  5/19/08
Associate VP, Academic Affairs

*If crosslisted, attach completed Course Crosslisting Agreement Form
Required Reading and Other Materials will be equivalent to:

Specific, Measurable Student Behavioral Learning Objectives:
Upon completion of this course the student should be able to:
1. Develop working familiarity with the AISC design requirements and specifications for structural steel.
2. Explain the fundamental analysis and design techniques required for the design of structural steel members.
3. Conduct design analysis of structural steel members in accordance with design codes.
4. Analyze steel structures for stresses and deformations.

Detailed Outline of Course Content (Major Topics and Subtopics) or Outline of Field Experience/Internship (experience, responsibilities and supervision):
I. Structural Steel Design:
   A. Analysis and Design of Structural Members Subjected to Bending and Axial Forces (Beam Columns)
   B. Analysis and Design of Bolted Connections
   C. Analysis and Design of Welded Connections
   D. Analysis and Design of Building Connections
   E. Analysis and Design of Composite Beams
   F. Analysis and Design of Composite Columns

Evaluation of Student Performance:
1. Homework assignments
2. Written examinations
3. Oral presentation on faculty-assigned topic