REGULAR COURSE SYLLABUS

College of: Professional Studies

Department: Engineering and Engineering Technology

Prefix & Course Number: SSE 1215 Crosslisted With*:

Course Title: Engineering Graphics-Solid Modeling

Transcript Course Title (30 characters): Engr. Graphics-Solid Modeling

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: 3 (2+2) Schedule Type: B Grade Mode: L

Face-to-Face or Equivalent Hours per course:

Lecture 30 Lab 30 Internship ___ Practicum ___ Other (please specify type and hours): 0

Additional Student Work Hours per course: 75

Variable topics umbrella course: No X Yes ___ If yes, number of credits/repeats allowed ___

APPROVED: ___________________________ 10/12/2015

Department Chair OR Program Director

____________________________ 10-14-15

Dean OR Associate Dean

____________________________ 1-25-16

Associate VP, Academic and Student Affairs

*If crosslisted, attach completed Course Crosslisting Agreement Form
Catalog Course Description:
In this course students study solid modeling fundamentals, geometric constructions, multi-view projections, section views, and dimensioning using adequate CAD software.

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

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. Model the geometry of any given physical object using solid modeling.
2. Apply dimensions to engineering drawings.
3. Determine properties of and assign attributes to objects within solid models.

Detailed Outline Of Course Content:
I. Evolution of Geometric Modeling
II. Drawing Concepts
   A. Drawing Objects
   B. Drawing Setup and Organization
   C. Display, Selection, and Basic Editing
   D. Geometric Constructions
   E. Layouts and Plotting
   F. Dimensioning
III. Solid Modeling Concepts
   A. Semi-Algebraic Sets
   B. Boolean Operations
   C. Constructive Solid Geometry
   D. Parametric Modeling
   E. Editing Solid Models
IV. Drawings Based on Solid Models
   A. Projection Views
B. Section Views
V. Properties and Attributes of Objects within Models

Evaluation of Student Performance:
1. Examinations
2. Assignments