Southeast Missouri State University

Department: Industrial and Engineering Technology
Course No.: CM510
Title of Course: Building Information Modeling
Revision: New

I. Catalog Description and Credit Hours of Course

Concepts of Building Information Modeling (BIM) including creating computer model of buildings for scheduling, sequencing, cost estimating, management, and simulation of construction projects. Two hours lecture and two hours lab (3-credit hours)

II. Prerequisite: CM226

III. Purposes or Objective of the Course:

A. Understand concepts of Building Information Modeling (BIM)
B. Review software and technology available for BIM
C. Use BIM software create a model of a building
D. Use BIM to check for interferences and conflicts on a building construction project
E. Explore construction scheduling and sequencing using BIM
F. Explore cost estimating using BIM
G. Explore how BIM can assist in Facilities Management

IV. Expectations of Students:

A. Students are expected to attend all classes. If unable to attend a class, students are required to inform the instructor before the missed class date.
B. Students are responsible for all class notes and reading of the assigned materials. The majority of reading assignments will come from the textbook and handouts.
C. Students are responsible for taking all quizzes and examinations on assigned dates. Late submission without permission from the instructor may be rejected or granted partial credit.
D. Cellular phones and other electronic devices shall not be used during class periods. Phones are to be turned off or silenced during class.
E. Students are to be respectful to other students.

V. Course Content or Outline:

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<th>Hrs</th>
<th>Description</th>
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<tr>
<td>4</td>
<td>A. Understand concepts of Building Information Modeling (BIM)</td>
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<tr>
<td>8</td>
<td>B. Review software and technology available for BIM</td>
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<td>C. Building Modeling</td>
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<td>D. Midterm Exam</td>
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<td>E. BIM for conflicts and interference checking</td>
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<td>F. BIM for construction scheduling and sequencing</td>
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<td>G. BIM for cost estimating</td>
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<td>H. Project and presentation</td>
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<td>I. Final Exam</td>
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VI. Textbook(s) and/or Other Required Materials or Equipment:

VII. Basis for Student Evaluation:
Grading will consist of the following criteria and percentages:

Undergraduate Students:
A. In-Class Assignments, Quizzes, Research Project and Homework  55%
B. Mid Term Exam                          10%
C. Final Exam                              10%
D. Final Project                           25%

Graduate Students:
A. In-Class Assignments, Quizzes, Research Project and Homework  45%
B. Mid Term Exam                          10%
C. Final Exam                              10%
D. Final Project                           20%
E. Graduate Research Project & Presentation    15%

VIII. Grading Scale:

Undergraduate:  Graduate:
A = 100 – 90%   A = 100 – 90%
B = 89 – 80%   B = 89 – 80%
C = 79 – 70%   C = 79 – 70%
D = 69 – 60%   F = Below 70%
F = Below 60%

The weight of the evaluation criteria may vary according to each instructor and will be communicated at the beginning of the course.

IX. Academic Policy Statement:
Students will be expected to abide by the University Policy for Academic Honesty regarding plagiarism and academic honesty. Refer to: http://www6.semo.edu/judaffairs/code.html

X. Student with Disabilities Statement:
If a student has a special need addressed by the Americans with Disabilities Act (ADA) and requires materials in an alternative format, please notify the instructor at the beginning of the course. Reasonable efforts will be made to accommodate special needs.