**Course Syllabus**

**Instructor**
- Shane Germany
- 118 College Drive Box #5138
- Office: 601.266.6273
- Fax: 601.266.5717
- shane.germany@usm.edu

**Office Hours**
- See attached Office Hours for the Instructor.

**Drop Date**
- August 27, 2014 last day to drop the class without Academic Penalty.

**Prerequisites**
- None

**Credit Hours**
- 3hrs

**Course Description**
- **ACT450 VR Construction I**: Comprehensive study of virtual reality techniques to real-time visualization of engineering technology topics.

**Course Overview**
- This course is designed to provide students with an overview of BIM technology, theory, and application throughout the project lifecycle.

**Course Outcome(s)**
- Students will learn about advanced topics covering building information modeling use from project planning through building occupancy & maintenance. Students will also gain a basic level of understanding using BIM collaborative software tools to perform analysis of building design & construction.

**Student Learning Outcomes**
- Given BIM files, utilize standard software tools to make observations about design & constructability of building systems.
- Understand & provide feedback about the implementation and use of BIM during the design, construction, and occupancy phases of a building lifecycle.
- Utilize typical vocabulary, standards & language to describe BIM concepts as they relate to architecture, engineering, construction & facilities management.
Course Communication
• Outside of the classroom, the main point of communication shall be via Blackboard and/or email. Students must originate emails from their campus email address and utilize proper email etiquette. Subject headings for all email should begin with “ACT450”.

Required Text (s) and Readings
• Textbooks:
  

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<thead>
<tr>
<th>Status</th>
<th>ISBN</th>
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<tbody>
<tr>
<td>Required</td>
<td>978470541371</td>
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<td>9781118281710</td>
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  BIM Handbook. Author: Eastman, Publisher: Wiley, Edition: 2nd
  Mastering Autodesk Navisworks. Author: Dodds/Johnson, Publisher: Wiley, Year Published: 2013

• Other Supplementary material provided by the Instructor in digital format or available online as required.

Technology Requirements
• Access to and fully functional use of Blackboard & campus email. The ability to download, save, and read Microsoft Office & Adobe pdf documents.

Class Procedures and Requirements
• All assignments and course materials will be available via Blackboard. Tests, Quizzes, and assignment deliverables will be administered and submitted via Blackboard only unless student accommodations are required and pre-arranged.
• Typical classroom Lecture & Lab content will follow this format:
  • 10-15 min. Review of previous week’s material, questions, comments, etc.
  • 45 min. Lecture on subject material or Lab time for exercises, see schedule.
  • Review & Clarify upcoming deliverables, assignments, etc...
  • As a 400 level course students can expect to dedicate ample non-classroom time to review materials, complete exercises, and/or independently study the course materials and assignments.
• See attached Tentative Class Schedule for additional information.

Class Participation Policy
• For face-to-face sections, attendance is mandatory. Excused absences and a written proposal for completing missed work must be pre-approved by the Instructor prior to. Emergency, Medical, or Athletic/Academic leaves must be processed by the University and/or School of Construction and documentation shall be provided from administration. Two (2) or more Unexcused or Unauthorized absences will result in a failing grade for the semester. Missing assignments, tests, materials, etc. due to Unexcused or Unauthorized absences automatically receive a zero.

Evaluation Criteria (% of final average)
• Evaluation Criteria for assignments, quizzes, exams, exercises, etc... shall be weighted to a Final Grade and categorized as follows:
  • 40% Application: Navisworks Content
• 40% Theory: Quizzes, Writing Assignments, Readings
• 20% BIM Report: Independent research paper on BIM

Grading Scale
• Rubrics are provided for all assignments.
• Cumulative rubric scores for each Evaluation Criteria are equated to a 100pt scale.
• Final Grades are determined by a total of all Evaluation Criteria as weighted above. Numerical values are assigned Letter grades assigned as shown.

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<thead>
<tr>
<th>Numerical Value</th>
<th>Letter Grade</th>
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<tbody>
<tr>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
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<tr>
<td>70-79</td>
<td>C</td>
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<tr>
<td>60-69</td>
<td>D</td>
</tr>
<tr>
<td>0-60</td>
<td>F</td>
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Late Assignments or Projects
• Late work will not be accepted.

Academic Honesty
The following is from the USM Undergraduate Bulletin:

“When cheating is discovered, the faculty member may give the student an F on the work involved or in the course. If further disciplinary action is deemed appropriate, the student should be reported to the Dean of Students. In addition to being a violation of academic honesty, cheating violates the Code of Student Conduct and may be grounds for probation, suspension, and/or expulsion. Students on disciplinary suspension may not enroll in any courses offered by The University of Southern Mississippi.”

ADA Policy
If a student has a disability that qualifies under the American with Disabilities Act (ADA) and requires accommodations, he/she should contact the Office for Disability Accommodations (ODA) for information on appropriate policies and procedures. Disabilities covered by ADA may include learning, psychiatric, physical disabilities, or chronic health disorders. Students can contact ODA if they are not certain whether a medical condition/disability qualifies.

Address:
The University of Southern Mississippi
Office for Disability Accommodations
118 College Drive # 8586
Hattiesburg, MS 39406-0001
Voice Telephone: (601) 266-5024 or (228) 214-3232  Fax: (601) 266-6035
Individuals with hearing impairments can contact ODA using the Mississippi Relay Service at 1-800-582-2233 (TTY) or email Suzy Hebert at Suzanne.Hebert@usm.edu.

Tentative Class Schedule
• See attached.