Course Syllabus
BCT 400 Senior Project
Fall 2014

Instructor Information:

Name: Ismail Basha, Ph.D.
Office Address: Science Building, 730 E Beach Blvd, Long Beach, MS 39560
Office Number: Rm.# 107A,
Fax: 228 214 3241
Email: Ismail.basha@usm.edu
Office hours: By appointment. Contact me via Email.

Drop Date: See University Academic Calendar.

Prerequisites: Senior standing and approval of faculty adviser

Credit Hours: 3 hrs.

Course description: An exercise in applying the basic elements of professional construction project management in an actual construction project utilizing major elements of the CT program. The project includes developing a plan for the construction method to be used, developing a fictitious construction project organization, developing a plan for site layout, production of a project cost estimate, schedule and cash flow, preparing a construction bid, construction documentation and selected elements of the project control system. These are demonstrated using verbal and written communication proficiency essential to advance in the construction industry.

Course Overview: This course is an on-line Senior Capstone Experience course. The student must draw from knowledge obtained from all courses taken during underground education, published information and industry sources.

Required abilities: Proficiency with Microsoft Project, Excel, Word and PowerPoint is a must. High level of verbal, written communication and presentation abilities is essential. Also a very good comprehension of the materials covered in CT courses relating to requirements of this project, such as cost estimating, scheduling and other project management elements.

Course Outcome: A student capable to act as a professional construction project manager through the application of learned materials in as real as possible construction project.
Student Learning Outcomes: At the end of this exercise the student(s) will be able to produce the following documents:

1. Selected tendered project information.
2. Construction method statement.
3. Construction site layout.
4. Construction site organization.
5. Project cost estimate.
6. Project schedule.
7. Project cash flow.
8. Project quality control system.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Assign. #1</th>
<th>Assign. #2</th>
<th>Assign. #3</th>
<th>Assign. #4</th>
<th>Assign. #5</th>
<th>Assign. #6</th>
<th>Assign. #7</th>
<th>Assign. #8</th>
<th>Final report</th>
<th>Final presentation</th>
</tr>
</thead>
<tbody>
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<td>1 Selected tendered project</td>
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<td>2 Construction method statement.</td>
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<td>3 Construction site layout.</td>
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<td>4 Contractor’s site organization.</td>
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<td>5 Project cost estimate.</td>
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<td>6 Project schedule.</td>
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<td>7 Project cash flow.</td>
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<td>8 Project quality plan.</td>
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<td>9 Final project report</td>
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Course Communication: Course communications will be via USM e-mail, discussion board. Weekly discussions and student interaction will be through the discussion board.

Requires Text: None
Class Procedures and Requirements:

- The student is responsible to select an appropriate construction project to be used for his/her work. The proposed project must approved by the course professor. This is a very important and essential step in this course, it lays the foundation for all subsequent requirements/assignments.

  *Note: A suggested, only suggested source for tendering Documents of construction projects could be found on the web sites of several professional construction contracting organizations.*

- The student must draw from knowledge obtained from courses taken during undergraduate education, problem solving techniques, published information, and industry sources to complete the specified deliverables for a substantial construction project.

- The student will communicate via USM e-mail and discussion board with the instructor and peers.

- The student will produce an electronic version of the final reports.

- The student will conduct online research to evaluate and collect information in support of the project.

- The student will demonstrate the application of Construction Engineering Technology software.

- To receive credit for the Senior Capstone Experience, students must receive a grade of “C” or better.

- Professional work, language and behavior are required at all times. They will be considered during the grading process.

Evaluation Criteria:

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Project Selection &amp; Approval</td>
<td>5</td>
</tr>
<tr>
<td>Construction Method Used</td>
<td>10</td>
</tr>
<tr>
<td>Construction Site Layout plan</td>
<td>10</td>
</tr>
<tr>
<td>Construction Site organization</td>
<td>10</td>
</tr>
<tr>
<td>Project Cost Estimate</td>
<td>15</td>
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<tr>
<td>Project Schedule</td>
<td>15</td>
</tr>
<tr>
<td>Project Cash Flow</td>
<td>10</td>
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<tr>
<td>Quality Control</td>
<td>5</td>
</tr>
<tr>
<td>Final Oral Presentation</td>
<td>10</td>
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<tr>
<td>Final Written Document</td>
<td>10</td>
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<tr>
<td>Total</td>
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</table>
Grading Scale:  
90 to 100   A  
80 to 89    B  
70 to 79    C  
60 to 69    D  
0  to 59    F  

Proctored Exams:  N/A  

Late Assignments or Projects  
No late deliverables will be accepted without a justified and documented excuse (such as severe illness and doctor’s note). The failure to submit any of the deliverables will result in a Failing grade (“F”) for the course.  

Academic Honesty:  "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."  
Students must send the instructor an e-mail using the course web site e-mail stating that they understand USM's academic honesty policy and also understand that if they do not uphold the standards of academic honesty, the instructor will enforce all applicable punishment.  

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.
**Deliverables:** Assignments for this course are to be handled individually, and will be graded individually. There are no student's teams groups in this course.

All deliverable assignments due on line will be formatted using:
1. Microsoft Word for papers,
2. Microsoft Excel for tables, and
3. PowerPoint for graphic and Oral presentations.
4. PDF for final report document.

All papers and graphic presentations must be uploaded through the university web. Bb.
Attached files should be named with the following information:
- BCT 400 Section H001/ H002
- Assignment name
- Name of person submitting

**Deliverables Schedule:**

<table>
<thead>
<tr>
<th>Deliverable #</th>
<th>Item</th>
<th>Due Date</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Project Selection &amp; Approval</td>
<td>09/05</td>
</tr>
<tr>
<td>2</td>
<td>Construction Method</td>
<td>09/12</td>
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<tr>
<td>3</td>
<td>Site Layout Plan</td>
<td>09/19</td>
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<tr>
<td>4</td>
<td>Contractor’s Site Organization</td>
<td>09/26</td>
</tr>
<tr>
<td>5</td>
<td>Cost Estimate</td>
<td>10/10</td>
</tr>
<tr>
<td>6</td>
<td>Project Schedule</td>
<td>10/24</td>
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<tr>
<td>7</td>
<td>Project Cash Flow</td>
<td>10/31</td>
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<tr>
<td>8</td>
<td>Project Quality Control System</td>
<td>11/07</td>
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<tr>
<td>9</td>
<td>Final Project Document</td>
<td>11/21</td>
</tr>
<tr>
<td>10</td>
<td>Final Oral Presentation</td>
<td>11/28</td>
</tr>
</tbody>
</table>
Project Management Procedure Outline

Marketing and Selecting the project to Bid on, #1

Bidding Documents

Construction Method Adopted, #2

Construction Know-how

When?

How Much, $?

Who is Responsible, to do what?

Where?

What is required?

Required Quality?

Site Risk Management?

Planning Phase

Cost Estimate, #5

Project Organization, #4

Construction Site Layout, #3

Cash Flow, #7

Quality Plan, #8

Safety Plan

Control Phase

Time Control

Cost Control

Quality Control

Planning Phase

Project Schedule, #6