The University of Southern Mississippi
College of Science and Technology - School of Construction
AEC 258 – Construction Planning and Scheduling
H001-ONLINE HBG

COURSE SYLLABUS

Instructor
• Dr. Tulio Sulbaran
• Office Address: TEC 250A, Bobby Chain Technology Building, Hattiesburg
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• Fax Number: 601-266-5717 (Main SOC Office)
• Email: Tulio.Sulbaran@usm.edu

Office Hours
• Office Hours*: T, TH & F 9:15-11:45am CST, F 2:00-5:00pm CST
• Or by Appointment
  *Subject to Change

Drop Date
• January 19-Last day to drop full semester classes and receive 100% financial refund
• April 5-Last day to withdraw full-semester classes and receive a grade of W

Please see Academic Calendar: https://www.usm.edu/registrar/spring-2017-full-term-academic-calendar

Prerequisites
• AEC 254

Credit Hours
• Two (3) credit hours

Course Description-Current USM Bulletin:
AEC 258: Identification of construction project objectives and the ordered activity necessary to complete them; durations of project tasks applied to the work plan.

Course Overview
This course is designed for you to attain basic knowledge and concepts of construction planning and scheduling. To successfully complete construction projects in today’s industry, the skills of work plan development and communication of scheduling and planning output is one of the foundations of our
Discipline. The lectures and readings will give you a body of knowledge upon which to base active-learning exercises in the lab and outside of class. These exercises are intended to teach you the skill sets required for project management and control. The course is delivered in a process-oriented format called the Total Cost Management (TCM) Framework. The content density is significant, but if you apply yourself, you will leave with the tools (and confidence) necessary to accept the responsibilities which will be given to you by future employers.

**Course Outcome(s)**
The goals of this course are to: 1- Provide students with the fundamental knowledge of a systematic framework approach to prepare construction schedule documents and to 2- Prepare the students to understand the bases to develop construction schedule documents using a commercially available application (Microsoft Project Professional 2016)

**Student Learning Outcomes**
At the completion of this course the students will be able to:
1. Explain Schedule Planning and Development documents (ACCE SLO 05)
2. Identify Construction Activities (ACCE SLO 05)
3. Develop Schedule implementing Activity Logic (ACCE SLO 05)
4. Estimate Activity and Project Durations (ACCE SLO 05)
5. Establish Schedule Control Basis (ACCE SLO 05)
6. Review and Validate Schedule (ACCE SLO 05)
7. Define and Allocate Resources (ACCE SLO 05)
8. Document and Communicate Schedule (ACCE SLO 05)
9. Prepare Schedule Deliverables and Progress Reporting (ACCE SLO 05)
10. Analysis and Communication of plan and schedule (ACCE SLO 05)

Several of the outcomes above must be completed using Microsoft Project Professional 2016

**Course Communication**
- **Course Material**: will be delivered through the Blackboard 9.1 Shell.
- **Email**: will be received and sent through the Blackboard 9.1 Shell. Students must include in the subject header 'BCT258_' prior to the stated subject topic.
- **Assessments**: All quizzes, exams, assignment, projects etc should be submitted by the student within the Blackboard course shell.
- **Help sessions**: will be conducted with either the Blackboard IM, Collaborate Classroom or WebEx.
- **Access**: Students are responsible for checking the information in Blackboard few times each week
- **Communication Etiquette**: Students must always use proper communication etiquette. If appropriate collegiate-level language is not used, the faculty will implement the proper academic penalties or remediation. Group/peer to peer communication tools provided in Blackboard are only to facilitate the completion of the assessment. If the group/peer to peer communication tool are used for anything not related to the completion of the assessment, the faculty will implement the proper academic penalties or remediation.

**Required Text (s) and Readings**
Links to the reading materials (below) are provided inside the course shell in Blackboard (under “Course Resources”, “Reading materials”). I recommend that you download the reading materials to your computer.

(2) AACE International Recommended Practices:
10S-90: Cost Engineering Terminology
14R-90: Responsibility and Required Skills for a Project Planning and Scheduling Professional
23R-02: Identification of Activities
24R-03: Developing Activity Logic
38R-06: Documenting the Schedule Basis
32R-04: Determining Activity Durations
49R-06: Identifying the Critical Path

(3) RS Means – Building Construction Cost Data (any year). RS Means is required in Estimating which is a pre-requisite for this class. You do not have to buy a new version. You can use the version that you used for estimating.

Technology Requirements
☐ **Computer with Windows 7:** To be able to install Microsoft Project **2016**
☐ **Microsoft Project 2016:** To be provided by the university
☐ **Report Creation in Microsoft Word 2007/2010:** My instructions will utilize Microsoft Office with the Ribbon navigation introduced in the 2007 version. The main requirement is that report exercises will be required to be submitted with .doc or .docx file extensions. You do not necessarily have to purchase a version of Microsoft Word for this course: OpenOffice.org is a free office suite which has a word processor, 'Writer', which saves files in the .doc format. The suite is available for download at www.openoffice.org. Keep in mind that I will not 'train' you to use any word processor in this course—that is your responsibility, in context of the requirements I specify.

☐ **Blackboard Shell Access:** It is your responsibility to enable your computer and web browser for access to and usability with Blackboard 9.1. Please take the time to learn how and what browsers and java versions are required. I have several browsers and java version installed on my personal computer for these reasons. For example, the following browsers are most compliant in my experience (in order of success):
  ~Windows Internet Explorer 9

- **Submission of assignments and taking assessments:** You are also responsible for ensuring that your assignments and assignments properly submit within the course shell. I will take a very limited number of submissions via email. For this reason, and the fact that technology is typically problematic, I will set up a section within the shell for you to test submissions so that **problems can be mitigated early in the course.**

Class Procedures and Requirements
- **Reading Material Quizzes:** At the end of each unit (on Wednesday approximately every two weeks unless otherwise instructed), there will be quizzes on the readings material assigned.
• **Assignments:** There might be homework during the semester to complement the quizzes.
• **Mid Term Exam and Second Exam:** Must be proctored
• **Final Exam:** There will not be a final exam for this course.

*All quizzes and Assignments will be due by 11:00pm CST on Wednesday unless otherwise instructed).
*All quizzes and Assignments will be taken/submitted within the course shell (no external email).

**Class Participation Policy**
- Students are expected to stay current with the readings assignments and to complete assessments by the required due dates.
- This course is a self-study course in the sense that I want to force original thought and questioning, therefore collaboration between students is not allowed. The instructor will take questions through the Discussion Board.

**Evaluation Criteria**

**Course:**

1. **Mid Term Exam**  
   **(MUST BE PROCTORED)**  
   - Due Wed Feb 15th, 2017
2. **Quizzes/Assignments**  
   - Due throughout the semester
3. **Final Project**  
   - Due Wed April 26th, 2017
4. **Second Exam**  
   **(MUST BE PROCTORED)**  
   - Due Wed April 26th, 2017

**Grading Scale**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100</td>
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<tr>
<td>B</td>
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<td>C</td>
<td>70-79</td>
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<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>0-59</td>
</tr>
</tbody>
</table>

**Proctored Mid Term Exam and Second Exam**
- The Mid Term Exam and Second Exam must be proctored. The students enrolled in the course have the responsibilities to ensure that this process is successful. Students must read all instructions about their responsibilities related to fees, forms, and follow-up located at the following web-page:
  [https://lec.usm.edu/proctoring/](https://lec.usm.edu/proctoring/)
- The Mid Term Exam and Second Exam are password protected and only the student verified proctor will be issued the password. The timeframes to take the Mid Term Exam and Second Exam are provided in the Blackboard Course Shell.
- No proctoring is required for Quizzes. Quizzes are not password protected.

**Late Assignments or Projects**
- Late work will not be accepted. Exceptions must be documented and at the discretion of the instructor.
**Academic Integrity**
All students at the University of Southern Mississippi are expected to demonstrate the highest levels of academic integrity in all that they do. Forms of academic dishonesty include (but are not limited to):

1. Cheating (including copying from others' work)
2. Plagiarism (representing another person’s words or ideas as your own; failure to properly cite the source of your information, argument, or concepts)
3. Falsification of documents
4. Disclosure of test or other assignment content to another student
5. Submission of the same paper or other assignment to more than one class without the explicit approval of all faculty members involved
6. Unauthorized academic collaboration with others
7. Conspiracy to engage in academic misconduct

Engaging in any of these behaviors or supporting others who do so will result in academic penalties and/or other sanctions. If a faculty member determines that a student has violated our Academic Integrity Policy, sanctions ranging from resubmission of work to course failure may occur, including the possibility of receiving a grade of “XF” for the course, which will be on the student’s transcript with the notation “Failure due to academic misconduct.” For more details, please see the University’s Academic Integrity Policy. Note that repeated acts of academic misconduct will lead to expulsion from the University.

**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.”

**Academic Honesty**
**Required:** Students must send to the professor BEFORE the Quiz 1 due date an e-mail using the Blackboard course shell messages/e-mail stating that they:

- Understand USM’s academic integrity policy and also understand that if they do not uphold the standards of academic honesty, the instructor will enforce all applicable punishment.
- Understand their responsibility under the 'Technology Requirements' section.
- Understand that work in this course is not to be collaborative, and that sharing electronic documents or course information between students (that are not in the same group) is prohibited and considered cheating.
- Understand their Communication Etiquette responsibility
- Understand their Mid Term and Second Exam Proctor requirements

If a student fails to send the statements above by the due date, the faculty will implement the proper academic penalties or remediation at his own discretion considering all other activities of the student.

Your cooperation is required in this course for learning or 'academic' integrity. You may have to do some supplemental research to feel confident of your answers (examples would be jobsite visits, websites with construction data, supplemental materials posted by the instructor, etc.). In any case it is always good to document your assumptions in the assignments. This will result in very unique submissions and if I feel that several of the assignments have been shared or collaborated upon, I will
act and then investigate. **If two or more assignments are duplicated, I will fail all parties involved, so please DO NOT SHARE YOUR WORK with others prior to the submission.**

**ADA Policy:** If a student has a disability that qualifies under the Americans 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 emailing ODA at oda@usm.edu.
## Class Schedule*

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Unit</th>
<th>Topic</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 16th – Jan 20th, 2017</td>
<td>1</td>
<td>Introduction Planning and Scheduling Overview</td>
<td>Jan 15th Martin Luther King</td>
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<tr>
<td>2</td>
<td>Jan 23th – Jan 27th, 2017</td>
<td>1</td>
<td>Planning and Scheduling Overview</td>
<td>Hw &amp; Quiz 01 Due Wed Jan 25th</td>
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<tr>
<td>3</td>
<td>Jan 30th – Feb 3rd, 2017</td>
<td>2</td>
<td>Project Scope and Execution Strategy</td>
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<tr>
<td>4</td>
<td>Feb 6th – Feb 10th, 2017</td>
<td>2</td>
<td>Project Scope and Execution Strategy</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Feb 13th – Feb 17th, 2017</td>
<td>3</td>
<td>Plan for Schedule Planning and Development</td>
<td>(MUST BE PROCTORED) Due Wed Feb 15th</td>
</tr>
<tr>
<td>6</td>
<td>Feb 20th – Feb 24th, 2017</td>
<td>3</td>
<td>Identify Activities Develop Activity Logic</td>
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<tr>
<td>7</td>
<td>Feb 27th – Mar 3rd, 2017</td>
<td>3</td>
<td>Identify Activities Develop Activity Logic</td>
<td>Feb 27th - 28th Mardi Gras Due Wed Mar 1st</td>
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<tr>
<td>8</td>
<td>Mar 6th – Mar 10th, 2017</td>
<td>4</td>
<td>Estimate Durations Establish Schedule Requirements</td>
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<td></td>
<td>Mar 13th – Mar 17th, 2017</td>
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<td></td>
<td>Mar 13th - 17th Spring Break</td>
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<tr>
<td>9</td>
<td>Mar 20th – Mar 24th, 2017</td>
<td>4</td>
<td>Estimate Durations Establish Schedule Requirements</td>
<td>Hw &amp; Quiz 04 Due Wed Mar 22nd</td>
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<td>10</td>
<td>Mar 27th - Mar 31st, 2017</td>
<td>5</td>
<td>Allocate Resources Time Impact Establish Schedule Control Basis Review and Validate Schedule</td>
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<td>11</td>
<td>Apr 3rd - Apr 7th, 2017</td>
<td>5</td>
<td>Allocate Resources Time Impact Establish Schedule Control Basis Review and Validate Schedule</td>
<td>Hw &amp; Quiz 05 Due Wed Apr 5th</td>
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<tr>
<td>12</td>
<td>Apr 10th - Apr 14th, 2017</td>
<td>6</td>
<td>Critical Path Method (CPM) Claims Protections and Schedule Update</td>
<td>Apr 14th Good Friday</td>
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<tr>
<td>13</td>
<td>Apr 17th - Apr 21st, 2017</td>
<td>6</td>
<td>Critical Path Method (CPM) Claims Protections and Schedule Update</td>
<td>Hw &amp; Quiz 06 Due Mon Apr 17th</td>
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<tr>
<td>14</td>
<td>Apr 24th - Apr 28th, 2017</td>
<td>7</td>
<td>Schedule Update Review Document and Communicate Schedule Submit Schedule Deliverables Forensic Schedule Analysis</td>
<td>Final Project Due Wed Apr 26th Second Exam (MUST BE PROCTORED) Due Wed Apr 26th</td>
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<tr>
<td>15</td>
<td>May 1st - May 5th, 2017</td>
<td>7</td>
<td>Schedule Update Review Document and Communicate Schedule Submit Schedule Deliverables Forensic Schedule Analysis</td>
<td></td>
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<td></td>
<td>May 8th – May 11th, 2017</td>
<td>-</td>
<td></td>
<td>No - Final Exam</td>
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* This syllabus may be revised by the faculty at his own discretion. If Syllabus revision are made the students will be notified.