

MEMORANDUM FOR STUDENTS ENROLLED IN CMGT 4331

SUBJECT: CMGT 4331 CONSTRUCTION SCHEDULING

Course Specific Policies

1. CMGT 4331 CONSTRUCTION SCHEDULING

Class Meets: Thursday 9:30 A.M. – 10:50 A.M. Room: RBN 2011

Online Class: Tuesday

Instructor: Mrs. Cherie Jones

Office: Ratliff Building South (RBS) 1036

Office Phone: (903) 565-5890

Email: cjones@uttyler.edu

2. Welcome to CMGT 4331 Construction Scheduling:

The purpose of this course is to provide the students with the necessary skills to adequately schedule and control residential, commercial, industrial, manufacturing, engineering, or business projects. Each student will generate bar charts, critical path networks, including early start, late start, early finish, late finish, durations, float, and identification of the critical activities that affect the timely completion of the project. The students will also correlate manpower leading and costs to the schedule and learn how to control and accurately report progress of the project. The students will be introduced to the use of computers in the scheduling of construction projects.

**A. HYBRID COURSE INFORMATION:**

CMGT 4331 is a hybrid course, meaning part of the class will be face-to-face and the other portion of the class will be online. The class is not 100% online, but the majority of class content will be posted online such as Video Lecture PowerPoints, Class Assignments, Scheduling Software Tutorials, and additional resources.

In class, students will receive a chance to ask questions about weekly assignments and the instructor will review over weekly topics as assigned weekly. Unless otherwise specified, each module has a class activity that will help reinforce what you have learned from online lectures and chapter reading. Most class activities will be done in class, so it is mandatory to attend class to receive full-participation points.

**What does it take to be successful in a hybrid course and scheduling class?**

When you enter the hybrid course online (blackboard), start the class by reviewing “Getting Started”. Here you will see an introduction video about the class, class syllabus/schedule and a class roadmap that will explain our journey in the class. Then take the time to review over the instructor’s bio to learn a little about her background!! Before getting started with Module 1, introduce yourself to the class on the class discussion board. This is your first class participation grade.

Each student is required to keep up with the modules weekly. There are 8 modules online. Each module will require you to take a quiz over the lecture. **So that there is no confusion, quizzes are due every Wednesday by 11:30 PM.** We will start the online portion of this class August 25, 2015. The first quiz will be due September 2<sup>nd</sup>.

**Bad Weather:**

If there is bad weather, you will still be expected to keep up with the online portion of the class. Please check announcements daily. I will do everything I can to help make this class be fun and a great experience for you, but I need for you to do your job as a student.

**B. CLASS LAB- Scheduling Software (Microsoft Project 2013 and Primavera P6)**

The second portion of the class will be taught in the computer lab. In the computer lab, students will be expected to follow Microsoft Project and Primavera tutorials. The tutorials will help with class semester project. There will be tutorials students can utilize online for additional practice. The class instructor will provide in class tutorials that will be turned in for a grade. It is important to keep up with the tutorials because each tutorial goes in order. The tutorials must be done in order. Students are required to turn in each assigned tutorial before moving forward to the next tutorial. To be successful in the class, it is important to keep up and attend lab.

3. If you will miss a scheduled class, you are still responsible for the material.
4. You are encouraged to seek additional instruction during my office hours or by appointment. If I am unable to have office hours, this information will be announced in class.

**Office Hours:** Monday, Wednesday, and Friday from 10:00 to 11:30 AM unless otherwise specified.

Please knock on door before trying to enter. If there is a change in office hours, the instructor will notify the class.

5. Class Room Procedures:
  - a. I will take attendance in class – please ensure information is circulated and turned back in to the instructor by the end of class.
  - b. Bring study notes, textbook, note-taking material, and calculator to every class. Most classes will have an assigned class exercise. Please bring your class exercise to class unless otherwise specified. You may not borrow or exchange calculators during graded events. If your calculator fails during a graded exercise, I am not responsible to furnish a substitute. Class preparation is your individual responsibility. Please refer to Calculator Policy below.
  - c. Required Textbooks:
    - 1) Mubarak, Saleh. *Construction Project Scheduling and Control*. Second Edition by Mubarak, Saleh, 2010, ISBN 978-0-470-50533-5.21
    - 2) Construction Scheduling. Second Edition by Newitt, Jay. 2009, ISBN – 13: 978-0-13-513782-6.
  - d. Turn in Homework: Homework will be in at the beginning of class on due dates. We have many assignments that you may have to do by hand and it just works out better to turn in assignments for this class in person instead of online. I will specify if there are assignments you can turn in online. You are required to use a straight edge for all submitted work done by hand, and colors can help with emphasis and clarity in your notes. Your homework must be neat and accurate in order to receive maximum credit on any assignment. Show all work in the path to the answer.

- e. Online Quizzes: There will be online quizzes throughout the semester. These quizzes are not meant to be tricky, but rather to encourage each of you to read the required assignments, review video lectures, and reward those who do. Quizzes are graded over class lectures online, but students are encouraged to make sure reading assignments are completed to do class homework.

6. Blackboard Information

- a. Course material will be posted on blackboard. Blackboard enrollment is now automatic with course registration, but you should ensure that you can access the class Blackboard page.
- b. I may also on occasion email you homework tips or points of clarification that are made aware to me outside of class. All email correspondence will take place through the Blackboard system, and therefore using your Patriot email accounts; so check your Patriot email account often.

7. Exams and Grading:

- a. Grade Breakout and Cutoffs:

**Course Points**

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Section Exams (2 at 250 each)	500 (25%)
Homework Assignments	220 (11%)
Tutorials: Microsoft Project & Primavera	100 (5%)- (50 points each)
Online Quizzes	80 (4%)- (8 Online worth 10 Point Each)
Semester Project	400 (20%)
Professional Practice Grade/Class Activities	200 (10%)
Final Examination (Comprehensive)	<u>500 (25%)</u>
	2000 (100%)

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Standard DEPARTMENT cutoffs for your personal growth are shown above. UNIVERSITY GRADE BREAKS WILL BE USED IN FINAL GRADE POSTING.

If you earn a cumulative average of less than 65% on all exams, or if you fail to earn at least 50% on the final exam you may fail the course, **regardless of your course grade**. Of course, final grades are only A, B, C, D, F. Therefore, a C- is a C for a final grade.

- b. Section Exams and Final Exam:

- 1) The dates for all exams are included in the course schedule. Official reasons for missing an exam are outlined in the UT Student Handbook. You are required to take a make-up Exam, regardless of your reason for missing the scheduled Exam. Report any conflict to me as soon as possible prior to the Exam. If you do not make arrangements prior to missing the Exam, the availability of a make-up is at the discretion of the instructor.
- 2) The section exams and final exam is closed book unless otherwise specified by instructor. You can use a **TI-30 calculator**. (See Calculator Policy Below)
- 3) Use the restroom prior to coming to class to take an exam! Suspicious restroom breaks in the middle of an exam are not acceptable.

- 4) **Solutions to exams will not be posted on Blackboard**, but you may stop by office and see exam solutions.

Calculator Policy:

c. Only NCEES approved calculators will be permitted during tests. Your test will be collected and grade will be a zero if you are caught using a non-approved calculator.

d. Laptops/PDAs/MP3 players/Cell Phones or other electronic devices: The use of any electronic device, except an approved calculator, **is not permitted during exams**. Your exam will be collected and your grade will be a zero if you are caught using a non-approved electronic device. The use of phones and MP3 players is not permitted during lessons.

e. Collection of Student Work: Throughout the semester I will collect student work (best, average, and worst) for the ABET course and outcomes notebooks. This will require me to make a copy of your work, keep your original and return a copy of the graded work to you. I will not draw attention as to what level of work you accomplished.

f. Embedded indicators of accomplishment of program outcomes: At times throughout the semester, portions of student work will be analyzed to determine if our program is accomplishing stated program outcomes based on established metrics. **If your work is below the minimum established metric, the instructor may ask for you to repeat the assignment for a better grade. If you do not make an effort to improve your grade, this will reflect upon your professional grade in the class.**

8. Homework:

**HOMEWORK FORMAT**: The production of a neat, organized, high-quality homework assignment cannot be overestimated nor can its importance to your course grade be overstated. A homework assignment should be something you are proud of and not something hastily “slapped together”. Toward this end, considerable emphasis will be placed on not only getting the correct answer but also on how the solution is presented.

**All homework is mandatory and becomes part of your grade.** Failure to submit any required homework **will result in an incomplete**. As a construction manager your goal is to make a clear, logical, and professional presentation of your work, which is both accurate and correct. As such both your presentation and the accuracy of your work are important, and both will be graded. It is critical that you show all of your work and leave “footprints” so that it can be easily followed.

**Turn in all homework on due date at the beginning of class in the class folder. DO NOT TURN IN ASSIGNMENTS THAT ARE NOT TYPED. Please use Microsoft Word or Excel. There may be a few assignments that are done by hand. If it is done by hand please turn in neat work. If you do not turn in typed assignments with a cover sheet, your assignment will be deducted by 10 points automatically. I will give you an opportunity to turn in the cover sheet to receive full credit, but don't make it a habit. If this happens after one day I will consider the cover sheet late.**

All main homework assignments will be turned in with a cover sheet. This is for grade security reasons. Your grade will be provided on the second page behind the cover sheet for privacy reasons.

To help with turning in cover sheets, I have provided a template attached to this syllabus you can use for all assignments. Just make 8 copies for your homework you will turn in by the due date. (See Attachment 5)

a. Papers/Problem Sets:

- 1) Use **Engineer paper only for homework assignments, unless the assignment is specified to do in Excel, Word, or Scheduling Software!** Only use one side of a page. Clearly present a **brief problem statement and a sketch** with your solution. Clearly and concisely explain each step.
- 2) Late Submissions. It is a basic principle of professionalism that **“Professionals are not late.”** A “COORDINATED LATE” submission occurs when you will miss the deadline for a graded homework assignment and you contact me in advance. Notification immediately before the submission will not suffice. Deductions to your assignment grade for late submissions will be given as follows:
  1. 0-24 hours late                      a deduction of 25% of the earned grade
  2. 24-48 hours late                    a deduction of 50% of the earned grade
  3. More than 48 hours late        No credit. **Assignments must still be submitted.**

Obviously there are circumstances that can occur that make a timely submission impossible and I will work with you when and if they occur. ***I will not play the game of having a stack of incomplete homework assignments turned in on the last day of class.*** *Late assignments should still be submitted within a week unless you coordinate otherwise with me.*

***Habitually late homework WILL have a significant negative impact on your professional practice grade!***

- b. Assigned readings: Doing the assigned reading prior to class will help you to understand the material presented during the instruction and will fill in gaps for things we do not cover (***I will not cover everything***). It will also make you more familiar with terms and concepts to be covered. Reading the assignment prior to attending class will enhance your ability to learn!

9. **Professional Practice.** During this semester, a portion of your grade in this course (10%) will be derived from a level of professional practice expectations. These expectations include a professional demeanor and work ethic (attitude), consistent daily preparation (assignment reading, appropriate materials brought to class, homework completed on time, etc.), commitment to learning and fulfilling obligations (attendance, on time), and being engaged in class activities (participation) worth 100 points.

10. **Academic Dishonesty:** Representation of other’s work as your own will not be tolerated. Cheating on examinations, quizzes, and homework and the false representation of work will be interpreted as academic dishonesty. Academic dishonesty will be subject to disciplinary actions as outlined by the UT Tyler Student Guide on Conduct and Discipline.

11. **University Policies**

**Students Rights and Responsibilities**

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: <http://www2.uttyler.edu/wellness/rightsresponsibilities.php>

**Grade Replacement/Forgiveness and Census Date Policies**

Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at <http://www.uttyler.edu/registrar>. Each semester’s Census Date can be found on the Contract

itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler. Full policy details are printed on each Grade Replacement Contract.

The Census Date is the deadline for many forms and enrollment actions that students need to be aware of. These include:

- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a “W” grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

### **State-Mandated Course Drop Policy**

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date).

Exceptions to the 6-drop include, but are not limited to, the following: totally withdrawing from the university; dropping a course for documented change of work schedule; or dropping a course for active duty service with the U.S armed forces or Texas National Guard. Petitions for exemptions must be submitted to the Registrar’s Office and must be accompanied by documentation of the extenuating circumstance. Please contact the Registrar’s Office if you have any questions. Please contact the instructor prior to dropping the course to receive any guidance in your course progress.

### **Disability Services**

In accordance with federal law, a student requesting accommodation must provide documentation of his/her disability to the Disability Support Services counselor. If you have a disability, including a learning disability, for which you request an accommodation, please contact Ida MacDonald in the Disability Support Services office UC 282, or call (903) 566-7079. Additional information may also be obtained at the following UT Tyler Web address: <http://www.uttyler.edu/disabilityservices>

### **Student Absence due to Religious Observance**

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

### **Student Absence for University-Sponsored Events and Activities**

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed. This includes University Athletes who should also provide a notice to the instructor of their athletic participation by the third class meeting.

### **Social Security and FERPA Statement:**

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the

Family Educational Rights and Privacy Act; grades will not be transmitted electronically nor will they be discussed with anyone outside of the University without your permission and in most cases presence during the discussion.

**Emergency Exits and Evacuation:**

Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. For Tornado warnings the safe areas within the building have been designated. The Instructor will identify to you these safe refuge areas. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Tyler Police, Fire Department, Fire Prevention Services, or other official Public Safety personnel.

**12. Help/Support IT**

**Where to Get Technology Help**

**Phone:** (903) 565-5555 or extension 555 on campus

**Email:** [itsupport@uttyler.edu](mailto:itsupport@uttyler.edu)

**13. Communication with Instructor**

The best way to get in touch with the instructor is through email. Please allow 24 hours response to your email during the week. If you have a question during the weekend, it may take up to 48 hours, but the instructor will do everything to answer questions immediately. This becomes extremely important while you are taking an exam. Please contact me immediately if you are logged out of your exam or experience any issues. You will be responsible for making sure I understand any technical difficulties you are having or you may receive a failing grade on the exam. **Do not wait till after the exam due date to notify me of any issues.**

**14. Job Site Tour/Liability Forms**

The class may do jobsite visits throughout the semester if time permits. Due to weather conditions, scheduled tour dates may need to be moved to another time during the week or preceding weeks. All jobsite visits would be added to class participation points. Please get with the instructor in case of an emergency.

All students will fill out a Liability Waiver Form. This information will be provided at the beginning of the semester by the instructor.

Cherie E. Jones, M.B.A.

**Attachment I. Course Schedule**

Class Syllabus				
CMGT 4331				
Date	Online Modules/Topic	Chapter	Class Exercise	Homework
<b>Aug</b>				
25	Online Introduction/Module 1 Vision	Mubarak: Ch. 1		
27	Class Introduction/Syllabus/Vision		Vision Ex. - CP	
<b>Sept</b>				
1	Online- Module 2 Time Management	Newitt Ch. 2		
3	Class- Time Management		Online Discussion Board - CP and Time Management Ex. CP	
8	Online Module 3- Gantt Charts	Mubarak: Ch. 2		
10	Class- Gantt Chart Class Exercises		Gantt Chart Ex. - CP	
15	Online Module 4 - Network Logic	Mubarak: Ch. 3		
17	Class - Network Logic Exercises		Network Logic- Ex. - CP	HW 2 due
22	Online Module 5 - Critical Path Method	Mubarak: Ch. 4		
24	Class- Critical Path Method Class Exercises		Jobsite Tour	HW 1 & 4 due
29	Online Module 6- Using Lags	Mubarak: Ch. 5		
<b>Oct</b>	<b>(The first part of October Semester Project Begins)</b>		<b>Semester Project Milestone 1</b>	
1	Class- Using Lags Class Exercises		Lag Ex. - CP	HW 3 & 5 due
6	Online- Module 7 Resource Allocation	Mubarak: Ch. 6		
8	Class- Duration Class Exercises		Resource All. Ex - CP	HW 6 due
13	Online- Module 8- Resources/Budgets			
15	<b>Class - Test 1 (Modules 1 - 6) - Last Day to Withdraw</b>		<b>Chapters 1 -5; Newitt 2</b>	<b>Test 1</b>
20	Online- Microsoft Project Tutorial 1	Newitt Ch. 22		
22	Lab- Microsoft Project			HW 7 due
27	Online - Microsoft Project - Tutorial 2 - 3			
29	Lab- Microsoft Project			HW 8 due
<b>Nov</b>	<b>(First Part of November Diagramming of S.P Due)</b>		<b>Semester Project Milestone 2</b>	
3	Online- Primavera P6 Setup	Newitt Ch. 23		
5	Lab- Primavera P6 Setup			Microsoft Project Tutorials Due
10	Online- Primavera P6			
12	Lab- Primavera P6			
17	Online- Primavera P6			Primavera P6 Tutorial Due
19	Semester Project Work Day - Lab			
24	Thanksgiving Holiday			
26	Thanksgiving Holiday			
<b>Dec</b>				
1	Semester Project - Take Home Test 2 Due			
3	<b>Semester Project Schedule Meeting Review</b>			<b>Semester Project Due</b>
8	Final Exams Schedule TBA			
*Note- "CP" stands for Class Participation Points. There are 100 points received from class participation in this class.				
"Ex" stands for Class Exercises that will help you do your homework.				



## **Attachment 2**

### **Mrs. Cherie Jones- All About Me!**



I grew up in a small town by the name of Overton, TX. (Yes, a really big town!) Although it was small, it was fun growing up on a farm and living up the country life. You may be wondering why in the world would I ever be interested in construction; my response, "Why not?" After all, what other profession gives you the opportunity to build some of the most amazing buildings, manage your own day to day task, and challenge you to do things that often seem impossible. Yes, I have been quite lucky to work as a construction manager.

Being a lecturer at UT Tyler has been a great honor. My goal is to share my work experience with students and provide a more practical approach to learning in the classroom. Over the past three years as a lecturer at UT Tyler I have taught the following classes: CMGT 2302, CMGT 3365, CMGT 4331, CMGT 4385, CMGT 4395, CENG 4339, CENG 4341, CMGT 4335. Outside of teaching, I was the Director of the Center for Professional Development and Education for the Longview University Center and Community Relations Coordinator from 2011 - 2012 school year.

#### **Education Background:**

I was a graduate of West Rusk High School located in New London, Texas where I graduated Valedictorian. In 2002, I graduated with a double degree in Construction Science and Environmental Design (Architecture) from Texas A&M University. In 2010, I received a Master's in Business Administration from University of Phoenix.

My background primarily consists of Construction Project Management, Architecture, and Product Development. For eight years, I worked for Centex Homes in Dallas, Texas. My role as a field manager provided me with the opportunity to build homes from 90K to 600K. Later, I worked with multi-family brand of Centex with City Homes and built luxury townhomes/condos ranging from 250K to 700K. I was a Designer/Drafter in the Product Development Department and enjoyed producing plans for Centex Homes.

After receiving Project Management experience, I decided to work for Humphrey's and Partners Architects as an Intern/Construction Administrator which gave me more exposure to the commercial industry. Before working for UT Tyler, I did a five month MBA Internship as a Production Supervisor for Ingersoll Rand Trane Residential in Tyler, TX.

#### **Hobbies:**

Outside of my career, motivational speaking has been a part of my life as an evangelist for 10 years. Writing inspirational books is a huge passion of mine. I have produced/directed three spiritual productions that include acting, dancing, and singing because I was a former dancer at Texas A&M and can't get dancing out of my system. Habitat for Humanity and Hearts n' Hammer was something I really enjoyed doing in Dallas. My favorite saying is, "It is not that we are inadequate. Our deepest fear is that we are powerful beyond measure. All things are truly possible for those that believe."

#### **Family:**

The support system I receive from my family is amazing! Definitely, in the construction profession you need a family with great understanding. I married my high school sweetheart Quincy Jones whom is a veteran of the U.S. Navy. We have an awesome, awesome son named Malcolm Jones. We enjoy fishing and spending time together as a family.

I look forward to learning more about you this semester and as we say in the field, "Let's getter done!"

**Attachment 3**  
**CMGT 4331 Course Objectives:**

- 1, Explain the concepts most frequently used in scheduling, such as precedence network, diagramming, resource allocation, monitoring and control.
2. Identify and explain task durations and identify relationships using bar charts, lags, float, and creation of precedence networks, diagramming, and calculations.
3. Explain how to update a project under deadlines.
4. Explain how to use concepts from Critical Path Method.
5. Explain how to manipulate schedules within constraints measuring the project status using various tools with computer application/reporting.
6. Perform basic scheduling software application for Microsoft Project 2013.
7. Perform basic scheduling software application for Primavera P6.
7. Explain how to use resource allocation/leveling and cost control budgets for scheduling.

## **Attachment 4 Semester Project Overview**

### **Semester Project- Delhi Medical Building Project No. 140-427-00**

The semester project is a two story office building and the completion of three (3) tenant suites. Included in this work are site improvements such as parking lots, retaining walls, and site drainage. The building is approximately 10,000 SF with one interior stairway and an elevator.

**Goal:** For the scheduling class, students should have an opportunity to schedule a real project from start to finish. The first task will be to gain an understanding of all activities that will be used for the project by evaluating the project specifications manual. The second task will be to develop a network diagram by hand and figure out the critical path calculations. Once the activities, durations, relationships (predecessors), and CPM are figured out, each team will input information in a scheduling software of choice: Microsoft Project 2013 or Primavera P6.

#### **Teams:**

Teams will be assigned at the beginning of October to work on the project. Each team member will be expected to carry equal amount of load to receive a fair team grade.

#### **Milestone Grades:**

There will be three main deadlines that each team will be expected to meet.

1. Milestone 1- Identifying Activities and Durations (some provided by instructor)
2. Milestone 2- Network Diagramming and Critical Path Calculations
3. Milestone 3- Utilization of Scheduling Software (Microsoft Project 2013 or Primavera P6)

Milestone 1- 100 Points

Milestone 2- 100 Points

Milestone 3- 200 Points

Total Points- 400

#### **Drawings and Specifications:**

The drawings and specifications will be provided for the teams to view as pdf. files.

#### **Final Deadline: December 3, 2015**

At the end of the semester, students will print out their work to display and briefly explain their process to schedule the project. This project is challenging yet fun. I do not expect each team to have exactly the same end product. My main concern will be did you think through each step realistically. It will be exciting to see how each group journey's through this project. I will expect for the scheduling process to be documented. Your team will need to demonstrate your journey to schedule the project from brainstorming notes (hand drawing of network diagram) to computer software schedule. This is your opportunity to be creative and think about how you (as a project manager) would present a schedule to a client, subcontractor, or management team. Good Luck!

**Attachment 5. Cover Sheet for Assignments**

**Name:** \_\_\_\_\_

**Assignment #** \_\_\_\_

**CMGT 4331 Construction Scheduling**

**The University of Texas at Tyler**

**Construction Management Department**

**Date Due:** \_\_\_\_\_