Online course MGMT 5311 – 110 Sustainable Operations & Services (CRN: 80330)
Fall 2019 – 16 Weeks – August 24 – December 11, 2020
Texas A&M University – Central Texas

COURSE DATES, MODALITY, AND LOCATION
This course runs from August 26, 2019 to December 13, 2019. This course is a 100% online course and uses the A&M-Central Texas Canvas Learning Management System: https://tamuct.instructure.com. Students should use your MyCT account and password (i.e. xx111).

INSTRUCTOR AND CONTACT INFORMATION
Instructor: Vinay Gonela
Office: Founder’s Hall (FH) 217
Phone: 254-501-5944
Email: Preferred email for course – Canvas “Inbox” vinay.gonela@tamuct.edu

Office Hours: My office hours will be on Monday 1:00PM to 4:00PM and Tuesday 9:00AM – 12:00PM. They will be conducted in online modality. For online meetings, I will be available through WebEx in canvas. However, students are required to schedule an appointment by sending a meeting request through canvas “Inbox in order to avoid congestions in scheduling. In addition, students can send me questions related to this course to my Canvas “Inbox”. I will try to respond to the student’s questions within 24 hours. It is to be noted that I will be as flexible as possible in terms of meeting with you online given the COVID – 19 situations. Therefore, feel free to request WebEx meeting, if you are struggling with this course. Any questions unrelated to this course can be directed to my email: vinay.gonela@tamuct.edu. Any deviations in office hours and correspondence due to meetings and conferences will be communicated to students through instructor announcements.

Student-instructor interaction: As suggested in office hours, students can contact me through canvas for two important reasons in relation to this course: (1) to schedule a WebEx meeting; and (2) to ask questions in relation to the course. I often check my canvas “Inbox” twice a day. I will try to respond to your questions with 24 hours. Student engagement and success is very important to me; therefore, I suggest you contact me as soon as you realize that you have a question or struggling with course content.

WebEx Meetings: I will hold WebEx meetings every Monday 4PM – 5PM to discuss any questions related to the chapters.
WARRIOR SHIELD

Emergency Warning System for Texas A&M University-Central Texas

Warrior Shield is an emergency notification service that gives Texas A&M University-Central Texas the ability to communicate health and safety emergency information quickly via email, text message, and social media. All students are automatically enrolled in Warrior Shield through their myCT email account.

Connect to Warrior Shield by 911Cellular [https://portal.publicsafetycloud.net/Account/Login] to change where you receive your alerts or to opt out. By staying enrolled in Warrior Shield, university officials can quickly pass on safety-related information, regardless of your location.

COVID-19 SAFETY MEASURES

To promote public safety and protect students, faculty, and staff during the coronavirus pandemic, Texas A&M University-Central Texas has adopted policies and practices to minimize virus transmission. All members of the university community are expected to adhere to these measures to ensure their own safety and the safety of others. Students must observe the following practices while participating in face-to-face courses, course-related activities (office hours, help sessions, transitioning to and between classes, study spaces, academic services, etc.) and co-curricular programs:

- Self-monitoring—Students should follow CDC recommendations for self-monitoring. Students who have a fever or exhibit symptoms of COVID-19 should participate in class remotely and should not participate in face-to-face instruction. Students required to quarantine must participate in courses and course-related activities remotely and must not attend face-to-face course activities. Students should notify their instructors of the quarantine requirement. Students under quarantine are expected to participate in courses and complete graded work unless they have symptoms that are too severe to participate in course activities.

- Face Coverings—Face coverings must be worn inside of buildings and within 50 feet of building entrances on the A&M-Central Texas Campus. This includes lobbies, restrooms, hallways, elevators, classrooms, laboratories, conference rooms, break rooms, non-private office spaces, and other shared spaces. Face coverings are also required in outdoor spaces where physical distancing is not maintained. The university will evaluate exceptions to this requirement on a case by case basis. Students can request an exception through the Office of Access and Inclusion in Student Affairs.

  - If a student refuses to wear a face covering, the instructor should ask the student to leave and join the class remotely. If the student does not leave the class, the faculty member should report that student to the Office of Student Conduct. Additionally, the faculty member may choose to teach that day’s class remotely for all students.

- Physical Distancing—Physical distancing must be maintained between students, instructors, and others in the course and course-related activities.

- Classroom Ingress/Egress—Students must follow marked pathways for entering and exiting classrooms and other teaching spaces. Leave classrooms promptly after course
activities have concluded. Do not congregate in hallways and maintain 6-foot physical distancing when waiting to enter classrooms and other instructional spaces.

- The university will notify students in the event that the COVID-19 situation necessitates changes to the course schedule or modality.

COURSE INFORMATION

Course Overview and description: This course focuses on providing students with a broad understanding and knowledge of operations and service management concepts. Emphasis will be placed on incorporating various aspects of sustainability, while designing, managing and controlling business operations and services. In addition, students will be exposed to several analytical tools, models and methodologies that are necessary to design, develop and evaluate various sustainable business operations. Prerequisites: Management and Statistics Leveling.

Course Learning Objective (CLO): All the course objectives can be achieved by mastering each weekly objective. At the end of the course, students meet the CLOs by achieving acceptable grade of 633.5 points (70%) or above for the entire course.

CLO 1: Identify and explain effectively the dynamics of operations and services in various business operations
CLO 2: Demonstrate the effective use of operations and service management concepts, models, tools, and methodologies related to both manufacturing and services based organizations
CLO 3: Apply decision making and analytical skills to solve operations and service related problems
CLO 4: Explain sustainability concepts comprehensively as applied to business operations and services
CLO 5: Use sustainability while analyzing operations and services and Vice versa
CLO 6: Design sustainability driven business operations and services

Week based Student Learning Outcomes (W_SLO): W_SLO enable students to master the skills in each chapter. Gaining proficiency in each of the week’s objective will enable students achieve CLOs. Students gain proficiency by achieving an acceptable grade of 633.5 points (70%) or above for the entire course.

Week 1 (CLO4): After completing this week, students should be able to:
W1_SLO 1.1: Define the term Sustainability
W1_SLO 1.2: Explain triple bottom line in sustainability

Week 2 (CLO1, CLO2, CLO3, CLO6): After completing this week, students should be able to do:
W2_SLO 2.1: Define Operations management
W2_SLO 2.2: Explain the distinction between goods and services
W2_SLO 2.3: Explain the difference between production and productivity
W2_SLO 2.4: Compute single factor and multi factor productivity
W2_SLO 2.5: Identify critical variables in enhancing productivity
W2_SLO 2.6: Explain how stakeholder engagement increases productivity, sustainability and profit
Week 3 (CLO 1, CLO 2, CLO 3, CLO 4, CLO 6): After completing this week, students should be able to do:
W3_SLO 3.1: Define mission and strategy
W3_SLO 3.2: Identify three strategic approaches to competitive advantage
W3_SLO 3.3: Understand the significance of key success factors and core competencies
W3_SLO 3.4: Use factor rating to evaluate both country and outsource providers
W3_SLO 3.5: Identify and explain four global operations strategy options
W3_SLO 3.6: Develop factor rating method to determine sustainable business

Week 4 (CLO 3): After completing this week, students should be able to do:
W4_SLO 4.1: Use Gantt chart for scheduling
W4_SLO 4.2: Draw activity-on-activity (AOA) networks
W4_SLO 4.3: Complete forward and backward passes for a project
W4_SLO 4.4: Determine a critical path for a project
W4_SLO 4.5: Calculate the variances of the activity times

Week 5 (CLO 2, CLO 3, CLO 5): After completing this week, students should be able to do:
W5_SLO 5.1: Understand the three-time horizons and which models apply for each
W5_SLO 5.2: Explain when to use each of the four qualitative models
W5_SLO 5.3: Apply the naïve, moving average, exponential and trend methods
W5_SLO 5.4: Compute Mean absolute deviation and mean square error
W5_SLO 5.5: Conduct a regression and correlation

Week 6 (CLO 1, CLO 2, CLO 3, CLO, CLO 5): After completing this week, students should be able to do:
W6_SLO 6.1: Define product life cycle
W6_SLO 6.2: Describe a product development system
W6_SLO 6.3: Explain how time-based competition is implemented by operations management
W6_SLO 6.4: Describe how products and services are defined by operations management
W6_SLO 6.5: Explain how the customer participates in the design and delivery of services
W6_SLO 6.6: Apply decision trees to product and sustainability issues

Week 7 (CLO 3, CLO 4, CLO 5, CLO 6): After completing this week, students should be able to do:
W7_SLO 7.1: Describe corporate social responsibility
W7_SLO 7.2: Describe sustainability
W7_SLO 7.3: Explain 3Rs for sustainability
W7_SLO 7.4: Calculate design for disassembly
W7_SLO 7.5: Explain the impact of sustainable regulations on operations

Week 9 (CLO 1, CLO 2): After completing this week, students should be able to do:
W9_SLO 9.1: Define Quality and TQM
W9_SLO 9.2: Describe the ISO international quality standards
W9_SLO 9.3: Explain what six-sigma is
W9_SLO 9.4: Explain how benchmark is used in TQM
W9_SLO 9.5: Explain quality robust products and Taguchi concepts
W9_SLO 9.6: Use the seven tools of TQM

Week 10 (CLO 1, CLO 2, CLO 4): After completing this week, students should be able to do:
W10_SLO 10.1: Describe four process strategies
W10_SLO 10.2: Compute cross over points for different processes
W10_SLO 10.3: Use the tools for process analysis
W10_SLO 10.4: Identify recent advances in production technology
W10_SLO 10.5: Describe systems thinking and systems approach to sustainability

Week 11 (CLO 1, CLO 2, CLO 3, CLO 5): After completing this week, students should be able to do:
W11_SLO 11.1: Identify and explain seven major factors that affect location decisions
W11_SLO 11.2: Compute labor productivity to determine the best location
W11_SLO 11.3: Apply factor rating for location decisions
W11_SLO 11.4: Use center of gravity method
W11_SLO 11.5: Understand the difference between service and industrial sector location analysis
W11_SLO 11.6: Differentiate the location decisions under economic, environmental and social aspects of sustainability

Week 12 (CLO 1, CLO 2, CLO 5): After completing this week, students should be able to do:
W12_SLO 12.1: Explain the strategic importance of the supply chain
W12_SLO 12.2: Identify six sourcing strategies
W12_SLO 12.3: Explain issues and opportunities in the supply chain
W12_SLO 12.4: Describe the steps in supplier selection
W12_SLO 12.5: Explain major issues in logistics management
W12_SLO 12.6: Explain closed loop supply chain and industrial symbiosis concepts

Week 13 (CLO 1, CLO 2, CLO 3): After completing this week, students should be able to do:
W13_SLO 13.1: Conduct an ABC Analysis
W13_SLO 13.2: Explain and use cycle counting
W13_SLO 13.3: Explain and use the EOQ model for independent inventory
W13_SLO 13.4: Apply production order model
W13_SLO 13.5: Explain and use quantity discount model

Week 14 (CLO 1, CLO 2, CLO 3): After completing this week, students should be able to do:
W14_SLO 14.1: Define JIT, TPS and lean operations
W14_SLO 14.2: Define the seven wastes and the 5Ss
W14_SLO 14.3: Explain JIT partnerships
W14_SLO 14.4: Define Kanban
W14_SLO 14.5: Explain the principles of the Toyota Production System

Criteria for meeting all course objectives and outcomes: Students meet competency requirements for this course by achieving a minimum of 633.5 points (70%) or above grade in the entire course.
Required Reading and Textbook(s):
This section presents the course material required for this course.
Required Textbook: Operations Management (Text only)
Author: Heizer
Edition: 12th
ISBN: 9780134130422

Note 1: A Student of Texas A&M University – Central Texas (TAMUCT) is not under any obligation to purchase a textbook from a university – affiliated bookstore.

Other required materials: Apart from the required textbook, students should have access to computer with Microsoft Word, PowerPoint, Excel, PDF reader along with proper internet service and browser (Required). Students can obtain a free PDF reader at http://www.adobe.com/products/acrobat/readstep.html. All the materials related to the course will be available in electronic format (Lecture slides, homework assignments, exams and solutions) in canvas: https://tamuct.instructure.com. Students are recommended to have a handheld calculator (should be able to perform square roots and above apart from addition, subtraction, multiplication and division – at a minimum) for calculations.

COURSE REQUIREMENTS
The assessments in this section will measure the CLOs and W_SLOs stated in the course information section. In this course, some of the outcomes will be measured several times using discussions, assignments, case studies, and exams.

Discussions: There will be 13 discussions in this course. Select Discussions from the menu found on the left side of the Canvas class home page. All discussions and questions will be placed in their respective topics for ease of understanding by all class members and the instructor. All entries are threaded so that you may easily see a question and the respective responses to that question. All class members are required to fully participate in the discussions by sharing their perspectives of a chapter or supplemental reading. Students must post at least one new discussion and reply at least two discussions to receive full credit. Please note that this does not mean you will post assignment and case study solutions to the assignments. Posting assignment and case study solutions to discussion will result in deduction of 20 points from final score for each instance.

Assignments: There will be 12 assignments. Each assignment will be worth 20 points adding to 240 points. Each assignment will assess the CLOs pertaining to a particular chapter (see course outline and calendar). Each assignment will have several essay questions and problem-solving questions. The rubric for the assignment essay questions and problem-solving questions are available in page 19 and page 20 respectively. Students can handwrite, scan (or make image) and post the assignments to the canvas. However, make sure that the handwriting is readable. If the assignment is not readable, students will not receive any points. For assignments, students must show the work in order to receive full credit. Points will be awarded based on the correctness and quality of the work. Each assignment will assess CLOs and CH_SLOs pertaining to the chapter (see course information). However, all the assignments together will assess all the CLOs.

Case studies (CLO3, CLO4, CLO5, and CLO 6): There will be three case studies. Each case
study is worth 50 points adding to 150 points. The rubric for case study will be provided when case study is given. The case study must be typed in APA style. Please refer to the following link for APA style: https://owl.english.purdue.edu/owl/resource/560/18/. Students must show the work in order to receive full credit. Points will be awarded based on the correctness and quality of the work.

**Exams (CLO1, CLO2, CLO3, CLO4, and CLO5):** There will be an online exam. Each exam is worth 100 points. Both the exams will consist of essay questions and problem-solving questions. The rubrics for Exam essay questions and problems are provided in page 19 and page 20 of the syllabus.

**Project (CLO1, CLO2, CLO3, CLO4, CLO5, and CLO6):** There will be one project which will require students to write a report. The project will include either literature review or evaluate a company’s business strategy such as location, process, and technology selection from a sustainability perspective. The topics might include, but not limited to closed loop supply chains, industrial symbiosis systems, waste management etc. The total points for the project will be 250 points which will include: (1) Project decision and topic selection; (2) Project deliverable 1; (3) presentation report and (4) Project peer evaluation. Note that project group selection does not have any points. The following presents the timeline for the project. All the information related to the project will be posted in project page.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Project group selection</td>
<td>5</td>
</tr>
<tr>
<td>Project decision and topic selection</td>
<td>8</td>
</tr>
<tr>
<td>Project deliverable 1</td>
<td>11</td>
</tr>
<tr>
<td>Project report</td>
<td>14</td>
</tr>
<tr>
<td>Project peer evaluation</td>
<td>15</td>
</tr>
</tbody>
</table>

**Note 2:** For assignments, students can choose to handwrite. However, make sure to be readable when you handwrite the assignments. If the assignment is not readable, students will not receive any points. Students can also solve the problems in Excel. If you solve the problems in Excel, please make sure to submit Excel document.

**Note 3:** Check the course outline and Calendar section for assessment due dates. All the discussions and assignments will be due on Monday @ 11:59 PM

**Late submission policy:** No late submissions will be accepted for this course.

**COURSE REQUIREMENTS**

**Grading Policy:** Following is the grading policy that will be used for this course:

**Course Evaluation:** Table 1 presents the point scale for each of the activities performed in this
Table 1: Activity scores and percentages

<table>
<thead>
<tr>
<th>Activity</th>
<th>Point scale</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussions (13)</td>
<td>13*5 = 65</td>
<td>7.18%</td>
</tr>
<tr>
<td>Assignments (12)</td>
<td>12*20 = 240</td>
<td>26.52%</td>
</tr>
<tr>
<td>Case studies (3)</td>
<td>50*3 = 150</td>
<td>16.57%</td>
</tr>
<tr>
<td>Exam 1</td>
<td>100</td>
<td>11.05%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>100</td>
<td>11.05%</td>
</tr>
<tr>
<td>Project decision and topic selection</td>
<td>20</td>
<td>2.21%</td>
</tr>
<tr>
<td>Project deliverable 1</td>
<td>30</td>
<td>3.31%</td>
</tr>
<tr>
<td>Project report</td>
<td>150</td>
<td>16.57%</td>
</tr>
<tr>
<td>Project peer evaluation</td>
<td>50</td>
<td>5.24%</td>
</tr>
<tr>
<td>Total</td>
<td>905</td>
<td>100%</td>
</tr>
</tbody>
</table>

Grade computation: Below is the grading scale for the course. Students earn the grades by completing the scheduled activities. There will no bonus points. Failure to submit the appropriate activities will result in a failing grade.

Grading Scale:
A = 814.5 – 905 (90% - 100%)  
B = 724 – 814.499 (80% – 89.99%)  
C = 633.5 – 723.99 (70% - 79%)  
D = 543 – 633.499 (60% - 69.99%)  
F = 542.99 and below (59.99% and below)

Grading Criteria Rubric and Conversion
The rubrics for essay questions and problems are provided in page 19 and page 20 respectively. It should be noted that assignments, and exams will contain essay questions and problems. Therefore, essay rubric (Page 19) will be used for essay questions and problems rubric (Page 20) will be used for problems. The rubric for the case study will be given with the case study.

Posting of Grades
All the grades will be posted on canvas. Students can view the grades in the “Grades” tab. The grades will be posted within one weeks of the submission.
<table>
<thead>
<tr>
<th>Week</th>
<th>Reading</th>
<th>Homework</th>
</tr>
</thead>
</table>
| Week 1:    | Syllabus                                                                | Discussion 1 (“Meet and Greet”) due by 08/30 @ 11:59 PM  
Assignment 2 due by 08/30 @ 11:59 PM  
(CLO 4, W1_SLO 1.1 - W1_SLO 1.2) |
| 08/24 – 08/30 | Supplemental Reading: Research the term sustainability and triple bottom line | Discussion 2 due by 08/30 @ 11:59 PM  
Assignment 2 due by 08/30 @ 11:59 PM  
(CLO 4, W1_SLO 1.1 - W1_SLO 1.2) |
| Week 2:    | Chapter 1                                                               | Discussion 3 due by 09/06 @ 11:59 PM  
Assignment 1 due by 09/06 @ 11:59 PM  
(CLO1, CLO2, CLO3, CLO6, W2_SLO 2.1- W2_SLO 2.6)  
Project group selection due by 09/06 @ 11:59 PM |
| 08/31 – 09/06 | Supplemental Reading:  
http://www.huffingtonpost.com/nadine-b-hack/stakeholder-engagement_b_1556070.html | Discussion 3 due by 09/06 @ 11:59 PM  
Assignment 1 due by 09/06 @ 11:59 PM  
(CLO1, CLO2, CLO3, CLO6, W2_SLO 2.1- W2_SLO 2.6)  
Project group selection due by 09/06 @ 11:59 PM |
| Week 3:    | Chapter 2                                                               | Discussion 4 due by 09/13 @ 11:59 PM  
Assignment 2 due by 09/13 @ 11:59 PM  
Case study 1 due by 10/10 @ 11:59 PM  
(CLO 1, CLO 2, CLO 3, CLO 4, CLO 6, W3_SLO 3.1- W3_SLO 3.6) |
| 09/07 – 09/13 | Supplemental reading:  
http://www.hindustantimes.com/india/india-s-cities-are-faced-with-a-severe-waste-management-crisis/story-vk1Qs9PJT8t1bPLCJkJsOTP.html | Discussion 4 due by 09/13 @ 11:59 PM  
Assignment 2 due by 09/13 @ 11:59 PM  
Case study 1 due by 10/10 @ 11:59 PM  
(CLO 1, CLO 2, CLO 3, CLO 4, CLO 6, W3_SLO 3.1- W3_SLO 3.6) |
| Week 4:    | Chapter 3                                                               | Discussion 5 due by 09/20 @ 11:59 PM  
Assignment 3 due by 09/20 @ 11:59 PM  
(CLO 3, W4_SLO 4.1- W4_SLO 4.5)  
Project decision (Option 1 or Option 2) due by 9/20 @ 11:59 PM |
| 09/14 – 09/20 |                                                              | Discussion 5 due by 09/20 @ 11:59 PM  
Assignment 3 due by 09/20 @ 11:59 PM  
(CLO 3, W4_SLO 4.1- W4_SLO 4.5)  
Project decision (Option 1 or Option 2) due by 9/20 @ 11:59 PM |
| Week 5:    | Chapter 4                                                               | Discussion 6 due by 09/21 @ 11:59 PM  
Assignment 4 due by 09/21 @ 11:59 PM  
(CLO 2, CLO 3, CLO 5, W5_SLO 5.1- W5_SLO 5.5) |
| 09/21 – 09/27 |                                                              | Discussion 6 due by 09/21 @ 11:59 PM  
Assignment 4 due by 09/21 @ 11:59 PM  
(CLO 2, CLO 3, CLO 5, W5_SLO 5.1- W5_SLO 5.5) |
| Week 6:    | Chapter 5                                                               | Discussion 7 due by 10/04 @ 11:59 PM  
Assignment 5 due by 10/04 @ 11:59 PM |
| 09/28 – 10/04 |                                                              | Discussion 7 due by 10/04 @ 11:59 PM  
Assignment 5 due by 10/04 @ 11:59 PM |
| Week 7: 10/05 – 10/11 | Chapter 5S | Discussion 8 due by 10/11 @ 11:59 PM  
Assignment 6 due by 10/11 @ 11:59 PM  
Case study 2 due by 11/10 @ 11:59 PM  
(CLO 3, CLO 4, CLO 5, CLO 6, W7_SLO 7.1- W7_SLO 7.6) |
|----------------------|-----------|------------------------------------------------------------------|
| Week 8: 10/12 – 10/18 | Chapter 1, Chapter 2, Chapter 3, Chapter 4, Chapter 5 and Chapter 5S  
Exam 1 on 10/18 @ 11:59 PM  
Project deliverable 1 due by 10/20 | Discussion 9 due by 10/25 @ 11:59 PM  
Assignment 7 due by 10/25 @ 11:59 PM  
(CLO 1, CLO 2, W9_SLO 9.1- W9_SLO 9.6) |
| Week 9: 10/19 – 10/25 | Chapter 6 | Discussion 10 due by 11/01 @ 11:59 PM  
Assignment 8 due by 11/01 @ 11:59 PM  
(CLO 1, CLO 2, CLO 4, W10.1_SLO 10.1- W10._SLO 10.6) |
| Week 10: 10/26 – 11/01 | Chapter 7  
Supplemental reading:  
https://www.youtube.com/watch?v=lhbLNBrQKc  
https://www.notjustalabel.com/editorial/saving-china-with-sustainable-fashion | Discussion 11 due by 11/08@ 11:59 PM  
Assignment 9 due by 11/08 @ 11:59 PM  
Case study due by 12/10@ 11:59 PM  
(CLO 1, CLO 2, CLO 3, CLO 5, W11.1_SLO 11.1- W11_SLO 11.6) |
| Week 11: 11/02 – 11/08 | Chapter 8 | Discussion 12 due by 11/15@ 11:59 PM  
Assignment 10 due by 11/15 @ 11:59 PM  
(CLO 1, CLO 2, CLO 5, W12_SLO 12.1- W12_SLO 12.6) |
| Week 12: 11/09 – 11/15 | Chapter 11  
Supplemental reading:  
http://www.coca-colacompany.com/stories/our- |
### Approach to Sustainable Packaging


| Week 13: 11/16 – 11/22 | Chapter 12 | Discussion 13 due by 11/22 @ 11:59 PM  
Assignment 11 due by 11/22 @ 11:59 PM  
(CLO 1, CLO 2, CLO 3, W13_SLO 13.1- W13_SLO 13.5) |
|------------------------|------------|------------------------------------------------------------------|
| Week 14: 11/23 – 11/29 | Chapter 16 | Discussion 14 due by 11/29 @ 11:59 PM  
Assignment 12 due by 11/29 @ 11:59 PM  
(CLO 1, CLO 2, CLO 3, W14_SLO 14.1- W14_SLO 14.5) |
| Week 15: 11/30 – 12/06 | **Project Report due on 12/04 @ 11:59 PM**  
**Project peer evaluation 12/06 @ 11:59 PM** |
| Week 16: 12/07 – 12/11 | **Exam 2 due by 12/10 @ 11:59 PM**  
**Chapter 6, Chapter 7, Chapter 8, Chapter 11, Chapter 12, Chapter 16** |

### Important University Dates:

<table>
<thead>
<tr>
<th>Date</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/24</td>
<td>Classes Begin for Fall semester</td>
</tr>
<tr>
<td>08/26</td>
<td>Deadline for Add, Drop, and Late Registration for 16- and First 8-Week Classes</td>
</tr>
<tr>
<td>09/07</td>
<td>Labor Day</td>
</tr>
<tr>
<td>09/09</td>
<td>Deadline to drop 16-Week Classes with No Record</td>
</tr>
<tr>
<td>10/30</td>
<td>Deadline for Graduation Application for Ceremony Participation</td>
</tr>
<tr>
<td>11/06</td>
<td>Deadline to Drop 16-Week Classes with a Quit (Q) or Withdraw (W)</td>
</tr>
<tr>
<td>11/11</td>
<td>Veterans Day (Observed) - No Class</td>
</tr>
<tr>
<td>11/26-27</td>
<td>Thanksgiving</td>
</tr>
</tbody>
</table>
| 12/11      | Fall Commencement Ceremony Bell County Expo Center 7:00 p.m.  
Fall Semester Ends                                                   |
TECHNOLOGY REQUIREMENTS AND SUPPORT

Technology Requirements

This course will use the A&M-Central Texas Instructure Canvas learning management system. We strongly recommend the latest versions of Chrome or Firefox browsers. Canvas no longer supports any version of Internet Explorer.

Logon to A&M-Central Texas Canvas [https://tamuct.instructure.com/] or access Canvas through the TAMUCT Online link in myCT [https://tamuct.onecampus.com/]. You will log in through our Microsoft portal.

Username: Your MyCT email address. Password: Your MyCT password

Students should have access to computer with Microsoft Word, PowerPoint, Excel, PDF reader along with proper internet service and browser (Required). Students can obtain a free PDF reader at http://www.adobe.com/products/acrobat/readstep.html. All the materials related to the course will be available in electronic format (lecture slides, video lectures, homework assignments, exams and solutions) in canvas: https://tamuct.instructure.com. Students will also be required to submit the scanned copies or images of the assignments and exams. Therefore, students are required to have scanner and/or camera to take pictures. In case of picture submissions, make sure to have in Jpeg format. I will not be able to accept HEIC format which is usually generated when you take picture from iPhone. If you take a picture from iPhone insert the picture into Microsoft word and submit it as word document.

Canvas Support

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with Canvas. You can select “Chat with Canvas Support,” submit a support request through “Report a Problem,” or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

Online Proctored Testing

A&M-Central Texas uses Proctorio for online identity verification and proctored testing. This service is provided at no direct cost to students. If the course requires identity verification or proctored testing, the technology requirements are: Any computer meeting the minimum computing requirements, plus web camera, speaker, and microphone (or headset). Proctorio also requires the Chrome web browser with their custom plug in.

Other Technology Support

For log-in problems, students should contact Help Desk Central

24 hours a day, 7 days a week

Email: helpdesk@tamu.edu
Phone: (254) 519-5466
Web Chat: [http://hdc.tamu.edu]

Please let the support technician know you are an A&M-Central Texas student.
UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES

Drop Policy

If you discover that you need to drop this class, you must complete the Drop Request Dynamic Form through Warrior Web.

[https://dynamicforms.ngwebsolutions.com/casAuthentication.ashx?InstID=eaed95b9-f2be-45f3-a37d-46928168bc10&targetUrl=https%3A%2F%2Fdynamicforms.ngwebsolutions.com%2FSubmit%2FFForm%2FStart%2F53b8369e-0502-4f36-be43-f02a4202f612].

Faculty cannot drop students; this is always the responsibility of the student. The Registrar’s Office will provide a deadline on the Academic Calendar for which the form must be completed. Once you submit the completed form to the Registrar’s Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar’s Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

Academic Integrity

Texas A&M University -Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Academic integrity is defined as a commitment to honesty, trust, fairness, respect, and responsibility. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. Academic misconduct is any act that improperly affects a true and honest evaluation of a student’s academic performance and includes, but is not limited to, working with others in an unauthorized manner, cheating on an examination or other academic work, plagiarism and improper citation of sources, using another student’s work, collusion, and the abuse of resource materials. All academic misconduct concerns will be referred to the university’s Office of Student Conduct. Ignorance of the university’s standards and expectations is never an excuse to act with a lack of integrity. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

For more information regarding the Student Conduct process, [https://www.tamuct.edu/student-affairs/student-conduct.html].

If you know of potential honor violations by other students, you may submit a report, [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0].

Academic Accommodations

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier-free education. The Office of Access and Inclusion is responsible for ensuring that students with a disability receive equal access to the university’s programs, services and activities. If you believe you have a
disability requiring reasonable accommodations please contact the Office of Access and Inclusion, WH-212; or call (254) 501-5836. Any information you provide is private and confidential and will be treated as such.

For more information please visit our Access & Inclusion Canvas page (log-in required) [https://tamuct.instructure.com/courses/717]

**Important information for Pregnant and/or Parenting Students**

Texas A&M University-Central Texas supports students who are pregnant and/or parenting. In accordance with requirements of Title IX and related guidance from US Department of Education’s Office of Civil Rights, the Dean of Student Affairs’ Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. Students should seek out assistance as early in the pregnancy as possible. For more information, please visit Student Affairs [https://www.tamuct.edu/student-affairs/index.html]. Students may also contact the institution’s Title IX Coordinator. If you would like to read more about these requirements and guidelines online, please visit the website [http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender—including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Associate Dean in the Division of Student Affairs at (254) 501-5909 to seek out assistance. Students may also contact the University’s Title IX Coordinator.

**Tutoring**

Tutoring is available to all A&M-Central Texas students, on a remote online basis. Visit the Academic Support Community in Canvas to view schedules and contact information. Subjects tutored on campus include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Tutors will return at the Tutoring Center in Warrior Hall, Suite 111 in the Fall 2020. Student success coaching is available online upon request.

If you have a question regarding tutor schedules, need to schedule a tutoring session, are interested in becoming a tutor, success coaching, or have any other question, contact Academic Support Programs at (254) 501-5836, visit the Office of Student Success at 212F Warrior Hall, or by emailing studentsuccess@tamuct.edu.

Chat live with a tutor 24/7 for almost any subject from on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log in and receive online tutoring support at no additional cost. This tool provides tutoring in over 40 subject areas except writing support. Access Tutor.com through Canvas.

**University Writing Center**

The University Writing Center (UWC) at Texas A&M University–Central Texas (TAMUCT) is a
free service open to all TAMUCT students. For the Fall 2020 semester, all services will be online as a result of the COVID-19 pandemic. The hours of operation are from 10:00 a.m.-5:00 p.m. Monday thru Thursday with satellite hours online Monday thru Thursday from 6:00-9:00 p.m. The UWC is also offering hours from 12:00-3:00 p.m. on Saturdays.

Tutors are prepared to help writers of all levels and abilities at any stage of the writing process. By providing a practice audience for students’ ideas and writing, our tutors highlight the ways in which they read and interpret students’ texts, offering guidance and support throughout the various stages of the writing process. While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the UWC is here to help!

Students may arrange a one-to-one session with a trained and experienced writing tutor by making an appointment via WCOnline [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu if you have any questions about the UWC and/or need any assistance with scheduling.

University Library

The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 250,000 eBooks and 82,000 journals, in addition to the 85,000 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available 24 hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place on Skype or in-person at the library. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our Library website [http://tamuct.libguides.com/index].

For Fall 2020, all reference service will be conducted virtually. Please go to our Library website [http://tamuct.libguides.com/index] to access our virtual reference help and our current hours.
OPTIONAL POLICY STATEMENTS

A Note about Sexual Violence at A&M-Central Texas

Sexual violence is a serious safety, social justice, and public health issue. The university offers support for anyone struggling with these issues. University faculty are mandated reporters, so if someone discloses that they were sexually assaulted (or a victim of Domestic/Dating Violence or Stalking) while a student at TAMUCT, faculty members are required to inform the Title IX Office. If you want to discuss any of these issues confidentially, you can do so through Student Counseling (254-501-5955) located on the second floor of Warrior Hall (207L).

Sexual violence can occur on our campus because predators often feel emboldened, and victims often feel silenced or shamed. It is incumbent on ALL of us to find ways to actively create environments that tell predators we don’t agree with their behaviors and tell survivors we will support them. Your actions matter. Don’t be a bystander; be an agent of change. For additional information on campus policy and resources visit the Title IX webpage [https://www.tamuct.edu/compliance/titleix.html].

Behavioral Intervention

Texas A&M University-Central Texas cares about the safety, health, and well-being of its students, faculty, staff, and community. If you are aware of individuals for whom you have a concern, please make a referral to the Behavioral Intervention Team. Referring your concern shows you care. You can complete the referral online [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=2]. Anonymous referrals are accepted. Please see the Behavioral Intervention Team website for more information [https://www.tamuct.edu/student-affairs/bat.html]. If a person’s behavior poses an imminent threat to you or another, contact 911 or A&M-Central Texas University Police at 254-501-5800.

INSTRUCTOR POLICIES

Following are some of the instructor related policies. Students are required to follow them over the entire course period.

Class Policy: Instructor holds the right to change certain policies such as reading schedule, late submissions if the instructor feels it is necessary or beneficial for the class.

Late submissions: The instructor will not accept late submissions under any circumstances without appropriate documentation.

Office hour policy: Students are required to read the material at least once before coming to the office hours. The instructor will not teach the entire concept during office hours.

Emergency: It is the responsibility of the student to work with professor for assignment submissions under emergency. The student need to contact the professor as soon as possible, i.e.,
within 15 days of emergency. The professor will not accept any reasoning for non-submission after 15 days of emergency. If the student fails to complete 30% or 5 weeks of the course without notifying the professor, then the instructor will not accept any makeups or resubmissions. In that case, the student needs to either drop the course or receive the overall earned grade.

**Academic Integrity:** If the student violates any academic integrity (that include, but not limited to cheating on an examination or other academic work, plagiarism and improper citation of sources, using another student’s work, collusion, and the abuse of resource materials), the student will receive the following penalty:

1\textsuperscript{st} Offense: One downgrade and the student has to write a 1500 word paper on academic integrity. The due date for the submission of the paper will be 3 weeks from the day of realization of violation of academic integrity by the student.

2\textsuperscript{nd} Offense: The student will receive failing grade.

**Note 6:** Under both offenses mentioned above, the student will be reported to university’s Office of Student Conduct.

**Communication policy:** Students are expected to have read the course content at least once before communicating with the professor for doubts. The faculty will not be able to teach the entire course or chapter content during the communications. Faculty can help students with the doubts, but not with the entire topic.

**Netiquette:** Online communication is a very critical component of any online environment, and in this course, you are expected to conduct yourself in the same respectful manner that would be followed in a face-to-face course. Be sure to abide by the following guidelines when participating in the various methods of communication with instructors and classmates:

- Think your response through before responding. Before you submit your comments, proofread your comments to prevent any misunderstandings from occurring.
- Do not capitalize everything. Capital letters may be used for the occasional EMPHASIS but avoid typing completely in capital letters AS IT MAY APPEAR AS THOUGH YOU’RE SHOUTING!
- Keep conversations clean from foul language. The online course is an environment for positive feedback and productive dialogue. Profanity will not be tolerated.
- Use correct spelling and proper grammar. Keep your responses on topic and concise. Do not write long responses, for it will not likely be read or take up too much of another person's time.
- Do not ramble. You are not the only person behind a keyboard. Be mindful of others' feelings and treat them with the same respect that everyone deserves.
- Communicate respectfully.

In this course, you are also expected to abide by the University's student code of conduct and the policies on classroom. View the University's Student Code of Conduct online (https://www.tamuct.edu/student-affairs/student-conduct.html). Visit the Office of Student
Copyright Notice.
Students should assume that all course material is copyrighted by the respective author(s). Reproduction of course material is prohibited without consent by the author and/or course instructor. Violation of copyright is against the law and Texas A&M University-Central Texas’ Code of Academic Honesty. All alleged violations will be reported to the Office of Student Conduct.

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**Rubric for discussion questions**

*Note: This rubric will be used for discussion questions in Assignments, Case studies, and Exams*

<table>
<thead>
<tr>
<th>Criteria</th>
<th>No work (0%)</th>
<th>Missing work (25%)</th>
<th>Needs improvement (50%)</th>
<th>Met Expectations (75%)</th>
<th>Exceeds expectation (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence/Content 65%</td>
<td>Work is not submitted</td>
<td>The answer has several errors in both conceptual level (textbook) and communication clarity.</td>
<td>The answer contains one or two basic facts that are correct (textbook), but may also have incorrect statements as well.</td>
<td>The answer contains most (75%) of the points that needed to be included.</td>
<td>The answer contains the main points and provides comprehensive understanding.</td>
</tr>
<tr>
<td>Writing mechanics 35%</td>
<td>Work is not submitted</td>
<td>Writing mechanics are a major issue.</td>
<td>Problems with length, format, grammar, spelling, originality, or citations.</td>
<td>Only minor problems with length, format, grammar or spelling, or citations. No issues with originality</td>
<td>No problems with length, format, grammar or spelling, originality, or citations if needed.</td>
</tr>
</tbody>
</table>
# Rubric for problems

*Note: This rubric will be used for problems in Assignment, Case studies, and Exams*

<table>
<thead>
<tr>
<th>Criteria</th>
<th>No work 0%</th>
<th>Missing work 25%</th>
<th>Needs improvement 50%</th>
<th>Met expectations 75%</th>
<th>Exceeds expectations 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication (25%)</strong></td>
<td>• Work is not submitted&lt;br&gt;• Only final answers are presented without proper&lt;br&gt;• Does not use correct math vocabulary and symbols. Charts, tables and/or graphs are not used, even when appropriate</td>
<td>• Selects and uses some important information from the problem.&lt;br&gt;• Work is partly complete. It may not be very clear or organized.&lt;br&gt;• Tries to use words (labels and sentences), numbers and/or pictures to explain thinking. Some steps may be missing.&lt;br&gt;• Uses some correct math vocabulary and symbols. Tries to show using charts, tables, and/or graphs if appropriate.</td>
<td>• Selects and uses all important information from the problem.&lt;br&gt;• Work is complete. Organization is fairly clear.&lt;br&gt;• Uses words (labels and sentences), numbers, and pictures to explain thinking. Every step is shown.&lt;br&gt;• Uses correct math vocabulary and symbols. Shows data correctly using charts, tables, and/or graphs if appropriate.</td>
<td>• Uses appropriate information from the problem&lt;br&gt;• Uses words, numbers and pictures to clearly explain thinking. Every step is shown&lt;br&gt;• Uses correct math vocabulary and symbols. Shows data clearly and correctly using charts, tables, and/or graphs if appropriate.</td>
<td></td>
</tr>
<tr>
<td><strong>Problem Solving (75%)</strong></td>
<td>• No work is shown&lt;br&gt;• Shows little understanding of the problem&lt;br&gt;• No clear strategy was used&lt;br&gt;• Work has major errors&lt;br&gt;• Answer does not make sense</td>
<td>• Shows some understanding of the problem&lt;br&gt;• Tried a strategy&lt;br&gt;• Work is partly correct&lt;br&gt;• Answer may not make sense or solve the problem</td>
<td>• Shows good understanding of the problem&lt;br&gt;• Used a strategy that worked&lt;br&gt;• Work is mostly correct. Errors, if any, are minor&lt;br&gt;• Answer makes sense and solves the problem</td>
<td>• Displays thorough understanding of the problem&lt;br&gt;• Used the best strategy to solve the problem&lt;br&gt;• Work is correct&lt;br&gt;• Steps leading to the answer is correct&lt;br&gt;• Appropriate conclusions are made</td>
<td></td>
</tr>
</tbody>
</table>