SYLLABUS
Department of Management and Marketing,
Note: This syllabus is provided to you as a guide for the class content and expectations this semester. It is not a contract, and it is subject to change as necessary.

Course: Operations Management: MGT 571.720, Fall 2020, 3 credit hours CRN 11417.
Section 720: 6:45-9:15 p.m. Wednesday in BUS 121.

On-line: Go to https://d2l.sfasu.edu for D2L. Relevant announcements, course material and grades will be posted in Desire2Learn. Submit work electronically using D2L.

Description: An analysis of problems and relationships involved in the production of goods and services. Specific topics include service/product selection and design, process design, work methods and standards, inventory control, quality control and production control.

Professor: Dr. Matthew Lindsey, BU 403A, Phone 936-468-1858; e-mail: lindseymd@sfasu.edu

Office Hours: T/R 9:00 to 11:00, T 1:00 to 4:00 W: 8:00 to 11:00 and by appt. Questions may be asked by e-mail at any time.


Required Material: a pocket calculator and access to spreadsheet software (Excel) will be required.

Zoom: https://sfasu.zoom.us/j/94036237738?pwd=STZHb1hbbjFVZ3htMkRINFVSV3ZGdz09
Meeting ID: 940 3623 7738 Passcode: 515892

Course Objectives: Upon completion, the student will be able to logically analyze and integrate knowledge to work with and apply operations management models and theories in areas of capacity, decision analysis, forecasting, inventory, job design, layout, linear programming, location, project management, quality control, scheduling and queuing analysis problems. The student should also develop an understanding of the interactions between operations management and other functional areas within an enterprise and be able to define and use appropriate OM terminology. The student should also be able to discuss current international issues associated with operations management. The student will apply operations management knowledge to a real world productive system problem, analyze the problem, research the alternatives, and recommend a solution. The student will present the application in oral and written form.

Student learning outcomes: Program learning outcomes define the knowledge, skills, and abilities students are expected to demonstrate upon completion of an academic program. These learning outcomes are regularly assessed to determine student learning and to evaluate overall program effectiveness. You may access the program learning outcomes at http://www.sfasu.edu/cob/grad-plo.asp.

This course will provide an overview of key operational issues and processes used in service/manufacturing organizations from a management perspective. The course reviews the concepts and principals that guide managers in the evaluation and assessment of a service/manufacturing process. Students will be exposed
and be expected to participate in a direct discussion of these management concepts and principals that will illustrate the linkages between the inputs brought into the organization and the resultant products and/or services offered to customers. Students will be exposed to reading, lecture and discussion inputs that will provide them with the opportunity to have learned how to:

1. Demonstrate a capacity to think critically about the several and varied issues, inputs and outputs and their dependent relationships affecting the operations component(s) of an enterprise.
2. Be able to apply the logic of key operations/supply management principals found in the text to practical, real world business environments and circumstances.
3. Recognize and discuss the universality of application of these fundamental principles to both product and service environments.
4. Understand and explain with precision how ever-occurring and evolving business, economic and legislative events - beyond their control - may positively or negatively impact the operations of a chosen business or industry, and how they would address those events to their best advantage.

Grading:

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<tr>
<th>Item</th>
<th>Weight</th>
<th>Possible Points</th>
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<tbody>
<tr>
<td>Exams (2):</td>
<td>50%</td>
<td>400 (200 each)</td>
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<tr>
<td>Homework/ quizzes:</td>
<td>25%</td>
<td>200</td>
</tr>
<tr>
<td>Team Project</td>
<td>12.5%</td>
<td>100</td>
</tr>
<tr>
<td>The Goal paper</td>
<td>12.5%</td>
<td>100</td>
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<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td><strong>800</strong></td>
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1. Exams will consist of objective questions and/or short essay questions and/or problems, and will cover lecture material, homework, testable web pages, quizzes, information from the text, and current event information discussed during class. Each student is required to bring his or her own calculator to each exam. Be sure to contact me immediately if you believe you will miss an exam. Makeups are ordinarily possible only if the absence is for a documented excusable reason and arrangements are made in advance.

2. Reading and/or homework assignments will be made most class days. HOMEWORK MUST BE TYPED (PREPARED ELECTRONICALLY)

3. Attendance: Students are requested to not come and go during class except for emergency reasons.

4. Although not graded, every student is encouraged to participate regularly in discussions on readings, homework, and lectures. Students are encouraged to bring up current events that are relevant to the class.

5. All regrading requests should be submitted to the professor on the day the graded paper is returned.

6. Letter grades will be assigned to final averages only. You must earn 720 points or more to earn an A, 640 points or more for a B, and 560 or more for a C.

7. **Student Academic Dishonesty (University Policy 4.1)** Abiding by university policy on academic integrity is a responsibility of all university faculty and students.

Definition of Academic Dishonesty: Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to (1) using or attempting to use unauthorized materials on any assignment or exam; (2) falsifying or inventing of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were one’s own. Examples of plagiarism include, but are not limited to (1) submitting an assignment as if it were one's own work when is at least partly the work of another person;
(2) submitting a work that has been purchased or otherwise obtained from the Internet or another source; and/or (3) incorporating the words or ideas of an author into one's paper without giving the author credit. Penalties may include, but are not limited to reprimand, no credit for the assignment or exam, re-submission of the work, make-up exam, failure of the course, or expulsion from the university. Please read the complete policy at http://www.sfasu.edu/policies/student_academic_dishonesty.pdf

Incidents of academic dishonesty will be dealt with under the official university policy cited above. Unless otherwise directed, students may collaborate on homework only to the extent of discussing the assignment and are specifically prohibited from jointly working the assignments and/or turning in work done by another person. For homework, the first offence of copying and/or working an assignment jointly is punishable by a grade of zero on the homework portion of the quiz that includes that homework. The second offence is punishable by a grade of zero on the entire quiz that includes that homework. As indicated above, note that a student who aids a cheater (including failure to take reasonable steps to prevent copying) is as guilty as the cheater is. As required by the university policy, incidents of academic misconduct are reported to the dean.

8. **Students with Disabilities:** To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Room 325 in the Human Services Building, 468-3004/468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

9. **Course Grades (University Policy 5.5)** At the discretion of the instructor of record and with the approval of the academic unit head, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F, except as allowed through policy related to active military service. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the GPA. The complete policy is at http://www.sfasu.edu/policies/course-grades.pdf.

10. **This course will be taught with Internet enhancements using D2L. Students must visit the on-line course pages and check e-mail regularly to receive supplementary information and assignments.** Grade posting will be on D2L. Class communications will be sent using the D2L mail addresses. Students may send e-mail to the professor either directly or through D2L (lindseymd@sfasu.edu is checked more often).

11. **Student Conduct (University Policy 10.4)** Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the full Student Conduct Code at http://www.sfasu.edu/policies/student-conduct-code.pdf.) Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic, or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/ inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare Early Alert Program.

Masks (cloth face coverings) must be worn over the nose and mouth at all times in this class and appropriate physical distancing must be observed. Students not wearing a mask and/or not observing appropriate physical distancing will be asked to leave the class. All incidents of not wearing a mask and/or not
When joining a class via ZOOM keep your camera on and

- Dress and appear just as you would if attending class in person.
- Behave while Zooming as if sitting in a traditional classroom.
- Select a location that is a quiet room free of distractions (for yourself and others).
- Avoid public spaces with others milling in the background, road noises, etc.
- Avoid using distracting virtual backgrounds.
- It is better to mute your microphone when not speaking, however please try to avoid or eliminate background disruptions like pets, children, roommates, TV, music, etc..

12. The guidelines for the team research project is as follows: Choose an existing process for providing a company's goods or services, and then flowchart the existing process. (For example, a member of your group is responsible for developing personal financial plans for their customers; map the process of preparing the plans.)

1. The project is centered on a 15 minute presentation of your analysis to the class documented in a **written report**. Your analysis of the process should cover the **applicable** areas of process management. Including such items as:

   a. A detailed process flow chart including process inputs, process outputs, activities, activity times, processing and labor requirements.
   b. Capacity analysis of the process, including the strategies used to address expected customer demand.
   c. Suggested metrics used to measure the process or supply chains performance, and how a changed process may improve the metrics.
   d. Address other relevant issues as appropriate, such as:
      i. Customer demand and process capacity relationships
      ii. How production is planned, from customer demand to production schedules
      iii. Quality Management issues
      iv. Product delivery issues
      v. Collaboration and coordination issues
      vi. The interfaces of the process with both the external and internal customers
      vii. Waiting line issues and related staffing decisions
      viii. Other applicable process or supply chain management issues or concerns

2. Each **group** is expected to:

   a. Provide a short written proposal/midterm report (one to two pages including high level flowchart) stating the project the group selected and the process that will be analyzed or designed. Included should also be a preliminary project plan (what each team member is planning to do, with dates and benchmarks), and any concerns that the group may have at that time (e.g., AWOL members). Due dates are on the course schedule.

   b. Make a 15 minute (with an additional 5 minutes for questions) presentation of the project to the class. Your group will be given **no more** than 20 minutes for the presentation, so it is very important to plan what information you want your audience to receive. Present the big picture – **DO NOT** read your slides to the class. A good rule of thumb is plan for 2 minutes per PowerPoint slide. **Your presentation will be terminated after 15 minutes have passed!**

observing appropriate physical distancing will be reported to the Office of Student Rights and Responsibilities. Students who are reported for multiple infractions of not wearing a mask and/or not observing appropriate physical distancing may be subject to disciplinary actions.

c. Turn in PowerPoint slides (printed six to a page) plus full size process flow charts and tables to the drop box on or before the day of your presentation.

d. Document the project completely in a written report due in the drop-box the day before presenting.

3. Project Grading: The grade for the group project will be based on:

   a. Process Choice (not too technical or too trivial, clear process flowchart, measurement, improvement opportunities identified, project plan described (what the team actually did))

   b. Process Analysis (correctness of analysis, appropriate recommendations justified by logical analysis and use of appropriate methods and other improvement methods and tools, thorough analysis, appropriate measures collected and analyzed - or at least carefully planned, and originality of the analysis)

   c. Presentation (participation by multiple team members, within 20 minute time limit, logical flow, clarity and ease of understanding, interest in presentation by audience, and originality of presentation)

4. Note that all team members should be able to explain at a high level what was done, and be able to answer questions posed by the instructor and the class! It is unacceptable to simply present a project from work that was done by others. The presentation should make clear what was actually accomplished by each team member.

   a. The student's project grade will be the group's grade with adjustments based on peer evaluations if needed.

   b. Any project that is being used or has been used for credit in another class and is being used in whole or in part for this project needs to receive approval from the instructor. If it is currently being used as part of a project in another course both instructors must approve. Please ask if you are in doubt about the applicability of this note to your project.

5. At the end of the course you may be asked to evaluate yourself and the other members of your group. You will be asked to assign a value between 0 and 10 (10 = Best) on each of the criteria. A reason needs to be given for each score below 5. These ratings are gauging each team member’s contribution.

13. Instructions for The Goal individual paper.

   A. The paper does not need to summarize The Goal, but should discuss how the concepts from the book can be applied to improving a business process that you are familiar with. Any complex business process is acceptable to study. It would be easier to study one that you already know. (It should be different from the group project.)

   B. The report must be typed in 12-point font and double-spaced. The report should not exceed 4 pages, not including the exhibits (flow charts, graphs and diagrams) and appendices. The report is expected to be complete and concise. To improve the readability of the report, you should use section headings, such as, Company History, Problem/Process Description, Process Improvement (using The Goal), Conclusions/Recommendations. Flow Charts, graphs and diagrams should be used to clarify the written material.

   C. Failure to turn in the assignments when due will result in the loss of all respective points.
**Homework Details (due by 11:59 PM the day before class)**

**Due on 9/2:** Case- Complete the Analytics Exercise (Comparing Companies Using Wall Street Efficiency Measures) on page 16. You should prepare a short report and presentation explaining your analysis following the 4 steps at the end of the exercise. Step 4 is very important and should be a detailed response.

**Due on 9/9:** Complete the Case: The Tao of Timbuk2 on page 36 & 37 and answer the questions at the end of the Timbuk2 case.

**Due on 9/16:** Book problems and article-Complete Problems 6 and 7on page 100. Read Gardner and Mortensen, “How to Stay Focused if your assigned to multiple projects at Once” HBR November 2017 and Garthelf and Seiden “You need to manage digital projects for outcomes, not outputs” HBR February 2017. Prepare a 1 page write up discussing each article and concepts discussed in class or in the textbook. One article takes the point of view of a person on a project team, the other takes the point of view of the manager of a project. Discuss the different view points and identify the key differences.

**Due on 9/23:** Handout Complete Homework problem # 6 and #9 on page 158 and 159.

**Due on 9/30:** Handout and Case- Do Ch 8 Problem #9, page 216. “The Truth About Open Offices” HBR 2019 Develop question prompt.

**Due on 10/14:** Apply the Service System Design matrix to a service that you are familiar. Provide examples of each and discuss the relation for each between sales opportunity, degree of customer contact and process efficiency. Article TBD.

**Due 10/28:** Answer discussion questions 6 & 8 at the end of chapter 12 on page 359 and the Tesla Case. Answer Discussion Questions 2 and 3 on page 386 at the end of chapter 13. Complete problems from Ch 13, problems 2, 7, and 13 (p 387 & 389).

**Due 11/4:** Using Excel, Solve #8 and #10 on page 444.

**Due 11/11:** Solve problems 13 and 15 on p. 518.
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<tr>
<th>Week</th>
<th>Topic</th>
<th>Chapter(s)</th>
<th>Problem Sets</th>
<th>HW Dates</th>
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<td>Analytics EX p16</td>
<td>9/1</td>
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<tr>
<td>9/2</td>
<td>Strategy</td>
<td>2, 3</td>
<td>1 Case, p 36</td>
<td>9/8</td>
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<td>9/9</td>
<td>Projects</td>
<td>4</td>
<td>Problem 5 &amp; 20 Article</td>
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<td>9/16</td>
<td>Strategic Capacity &amp; Learning Curves</td>
<td>5, 6</td>
<td>Learning Curve HKW Handout</td>
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<td>9/23</td>
<td>Manufacturing Processes, Facility Layout</td>
<td>7, 8</td>
<td>Line Balance HKW Handout Article</td>
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<td>9/30</td>
<td>Service Processes, Catch up and Review</td>
<td>9</td>
<td>Article</td>
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<td>10/7</td>
<td>MIDTERM</td>
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<td>10/14</td>
<td>Process Capability and SPC Proposal DUE 10/16</td>
<td>13</td>
<td>Ch 13: 2, 7, 13</td>
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<td>10/21</td>
<td>Six Sigma Quality,</td>
<td>12</td>
<td>Ch 12: 6 &amp; 8</td>
<td>10/27</td>
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<td>10/28</td>
<td>Location, Logistics, Distribution-Goal Paper DUE 10/28</td>
<td>15</td>
<td>#8 &amp; #10 p 444</td>
<td>11/3</td>
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<td>11/4</td>
<td>Forecasting and Inventory Management</td>
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<td>#13 &amp; 15 p 518</td>
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<td>11/11</td>
<td>Theory of Constraints</td>
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<td>11/18</td>
<td>FINAL EXAM</td>
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<td>11/26</td>
<td>Thanksgiving Holiday Group Project Paper Due 11/29</td>
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<td>12/2</td>
<td>Presentations</td>
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<td>12/9</td>
<td>Presentations</td>
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Matthew Lindsey is inviting you to a scheduled Zoom meeting.

Topic: MGMT 5371 Operations Management
Time: Aug 26, 2020 06:30 PM Central Time (US and Canada)
   Every week on Wed, until Dec 9, 2020, 16 occurrence(s)
   Aug 26, 2020 06:30 PM
   Sep 2, 2020 06:30 PM
   Sep 9, 2020 06:30 PM
   Sep 16, 2020 06:30 PM
   Sep 23, 2020 06:30 PM
   Sep 30, 2020 06:30 PM
   Oct 7, 2020 06:30 PM
   Oct 14, 2020 06:30 PM
   Oct 21, 2020 06:30 PM
   Oct 28, 2020 06:30 PM
   Nov 4, 2020 06:30 PM
   Nov 11, 2020 06:30 PM
   Nov 18, 2020 06:30 PM
   Nov 25, 2020 06:30 PM
   Dec 2, 2020 06:30 PM
   Dec 9, 2020 06:30 PM

Please download and import the following iCalendar (.ics) files to your calendar system.

Weekly: https://sfasu.zoom.us/meeting/tJAtdO-qrTwtGdwn0V1PxTeSZicw3nvxOHSt/ics?icsToken=98tyKuCsrjgsGNeStxqPRowIAojCM-rztmZajadKiU_TUhBLVgbFDOTBJeFxBsD_

Join Zoom Meeting
https://sfasu.zoom.us/j/94036237738?pwd=STZHb1hhbjFVZ3htMkRINFVSV3ZGdz09

Meeting ID: 940 3623 7738
Passcode: 515892

One tap mobile
+13462487799,,94036237738#,,,,,0#,,515892# US (Houston)
+16699006833,,94036237738#,,,,,0#,,515892# US (San Jose)