IE 486 Service Systems Analysis, *Three semester hours*
Spring 2015,
TR 11:00 A.M.-12:15 P.M./AG/IT 211

**Instructor:**
E. Delbert Horton, Ph.D., P.E.
Associate Professor, Professional Track
Department Engineering & Technology

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Fax: (903) 886-5960
Email: Delbert.Horton@tamuc.edu
“Appointment Recommended”

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### COURSE INFORMATION

#### COURSE TEXT

*Service Management: Operations, Strategy, Information Technology*, James A. Fitzsimmons, 7e,

#### COURSE REFERENCE TEXT/MATERIALS

Instructor will provide handouts and use selected-Websites as references

#### COURSE REQUIREMENTS

This course should impart to the student the ability to visualize the engineering issues that face the service business versus similar issues in the manufacturing business. The IE student at the end of this course should be able to think from the point of view of a service business model, developing the requirements for supporting facilities, technology required in the serving business and metrics for the measure of service quality. Prerequisite: The student must be classified as a
senior IE student with 88 semester hours--used towards degree--completed.

**ASSESSMENT OF STUDENT OUTCOMES**

Upon satisfactory completion of the course, the student will:
1. be able understand the various roles of service in our economy.
2. be able to define and apply a service strategy
3. be able to specify requirements for both strategic and operational issues pertaining to services.
4. be able to understand and apply techniques for ensuring quality and evaluating long-term strategy planning.
5. acquire an understanding to analyze various service operations.
6. be able to specify the requirements, analyze, and design balanced facility and service management system for service business, e.g. third party logistic organizations.
7. be able to develop techniques for estimating service demands and to design the service capacity to accommodate these demands.

**COURSE REQUIREMENTS**

**COURSE EVALUATION**

The vision is that each student will be able by the completion of this course to analyze their selected business according to the three major parts of a service business (Part One, Part Two, and Part Three)

1. Understanding Services—Parts One/Two--------Exam 1
   a. Chapters 1-6
2. Designing the Service Enterprise ---Part Two----Exam 2
   a. Chapters, 7,8,9,10
3. Managing Service Operations-Part Three --------Final Exam
   a. Chapter 11, 12
   b. Comprehensive (all earlier chapters)

Examinations: Two examinations plus final examination. Each of the three examinations will be given in class. The Final Exam will be part comprehensive and part new materials that will be covered since Examination #2. No make-up examinations will be given. If a student misses one of the first two examinations, then that missed examination will be assigned 85.0% of that student's Final Exam grade, regardless of the reason(s) for missing the examination. An examination grade equal to "0" because of a violation of the student expectations or academic dishonesty policy stated earlier counts as a missed examination, but the grade cannot be replaced. Upon missing the second of the first three examinations, students will be assigned a final grade of "F" for the course and will not be allowed to attend any more class meetings, regardless of the reason(s) for missing the examination. If a student misses the Final Exam, then that student will be
assigned a final grade of "F" for the course, regardless of the reason(s) for missing the Final Exam. A Final Exam grade equal to "0" because of a violation of the student expectations or academic dishonesty policy stated earlier counts as a missed Final Exam. Students are required to use 8.5" × 11" sheets of green engineering paper handwritten front and back. Any graphical requirements will be done on the green engineering paper. Students will need a four-function calculator for each exam—unless the instructor states otherwise, it is the only computing electronic device and NO storage or other electronic devices are allowed during the exams. All cell phones will be silenced and placed at the front of the class room prior to taking the examinations.

Class Participation: The instructor will make regular class assignments during the daily class periods. It is expected that the student will do these assignments for the student’s benefit. The Class participation component of the course will be derived from the instruction’s evaluation of these assignments and possible periodic quizzes. The reviewed assignments will be evaluated by the instructor in the following manner and will account for 10% of the student’s course grade. The instructor selectively chooses 4 or 5 assignments for scoring of a regular assignment (Check minus, Check, Check plus). Check minus indicates the student needs to acquire a better understanding of the assignment subject matter. The other assignments will be given a cursory review, (as Check minus or Check) by the instructor. Periodic quizzes maybe given during the class periods following instructor’s presentation and after the student has had time to study these new concepts.

Each student will be expected to prepare these assignments, presentations of special topics and solutions of problems related to topics of the course and turn these assignments or presentations in on time. Late submittals will be subject to a late grade penalty. Further, late submittals will not be accepted if the student has already had more than two late submittals for the semester.

<table>
<thead>
<tr>
<th>Evaluation Factors</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examinations:</td>
<td>50%</td>
</tr>
<tr>
<td>Final Examination (cumulative):</td>
<td>30%</td>
</tr>
<tr>
<td>Class Participation:</td>
<td>20%</td>
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<tr>
<td>Regular Assignment</td>
<td>5%</td>
</tr>
<tr>
<td>Reviewed Assignment</td>
<td>10%</td>
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Students are expected to participate in class presentations and any problem sessions. Each student will be expected to present if called on by the instructor their understanding of assigned topics and/or solutions to assigned problem to the class. Non participation in these exercises will be counted against the student’s Class Participation component of the course grade.

Grading Scale:
A = 90-100%
\[ B = 80-89\% \\
C = 70-79\% \\
D = 60-69\% \\
\text{Fail} < 60\% \]

Note

All handouts including syllabi, exams, and topic presentation materials are the property of E. Delbert Horton, Ph.D., P.E. The instructor will keep all exam questions and presentation materials. The student will not be allowed to keep their examination submittals. If you desire to make a copy of your presentations, please make it before submitting the presentation materials.

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**COURSE AND UNIVERSITY PROCEDURES/POLICIES**

**ATTENDANCE POLICY**

No assignment will be excused. Late work will receive a deduction in score/grade. Students are expected to attend class and to participate in a manner to facilitate the educational process.

**CONDUCT IN CLASSROOM**

All students enrolled at the university shall follow the tenets of common decency and acceptable behavior conductive to a positive learning environment. Attendance will be kept and evaluated as part of class participation. The no sounding of cell phones and using a cell phone or text messaging is prohibited in class. No tobacco products, food and drinks are allowed in the classroom.

**STUDENT EXPECTATIONS:**

- Students are expected to attend all class periods. Students who do not attend class regularly may find this course to be more challenging than it should be. Students missing more than four class meetings will be assigned a final grade of "F" for the course and will not be allowed to attend any more class meetings, regardless of the reason(s) for the absences. Students are considered absent from a class meeting if they miss any portion of class time. Class time begins when the instructor arrives, but no earlier than the scheduled start of class time. Class time ends when the instructor dismisses class, but no later than the scheduled end of class time.

- Students are expected to make a legitimate attempt to pass the course, as judged by the instructor. Students who do not make a legitimate attempt to pass the course will be assigned a final grade of "F" for the course and will not be allowed to attend any more class meetings.
Any violations of the following student expectations, as judged by the instructor, will result in letter grade reductions to course work grades and/or to the final course grade of the offending student.

- Students are expected to have complete knowledge of and to be fully compliant with the Code of Student Conduct in the current Student Guidebook at http://www.tamu-commerce.edu/studentlife/guidebook.htm
- Students are expected to be fully prepared for each class before it meets.
- Students are expected not to be using the computer terminal at their disk during the instructor’s lecture except when the instructor has asked the class to use their desktop terminal for class participation. If the instructor has to ask a student for a second time during the semester to cease using their computer terminal the student final class grade will be reduced by one letter grade.
- Students are expected to refrain from any disruptive behaviors during class. This includes (but is not limited to) not being in their seat at the scheduled start time of class; packing up and leaving class before it is dismissed by the instructor; talking or making other noises while the instructor is presenting material or a student is asking a question; sleeping; doing work for another course; reading newspapers, magazines, or other non-course materials; and using a computer at times and for purposes other than those designated by the instructor.
- Students are expected to have cell phones (NO TEXTING), music devices, and pagers turned off during class.

**ACADEMIC DISHONESTY**

Efforts made by any student to achieve dishonestly will not be tolerated. Course work that students submit to the instructor is to be their own. Students may discuss course work and other course material with the instructor and/or fellow students (except during tests), but it is inappropriate to have another student do their course work or provide them with any portion of it. If the instructor determines a student has achieved dishonestly on course work, then that student will be assigned a grade of “0” for that entire course work. If the instructor determines a student has committed a second act of academic dishonesty, then that student will be assigned a final grade of “F” for the course and will not be allowed to attend any more class meetings. Each student will be expected to sign and turn in the TAMU-Commerce CoSE Academic Honesty Policy.

**University Specific Procedures:**

**ADA Statement**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

**Office of Student Disability Resources and Services**
# COURSE OUTLINE / CALENDAR

<table>
<thead>
<tr>
<th>TUESDAY</th>
<th>DATES</th>
<th>LECTURE:</th>
<th>SUBJECT MATTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN</td>
<td>20</td>
<td>Chapters 1, 2</td>
<td>Role of Service/Nature Srvs</td>
</tr>
<tr>
<td>JAN</td>
<td>27</td>
<td>Chapter 3</td>
<td>Service Strategy</td>
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<tr>
<td>FEB</td>
<td>3</td>
<td>Chapter 4</td>
<td>New Service Development</td>
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<tr>
<td>FEB</td>
<td>10</td>
<td>Chapter 5</td>
<td>Technology in Service</td>
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<tr>
<td>FEB</td>
<td>17</td>
<td>Chapter 5, cont.</td>
<td>Chaps 5/Chapter 6</td>
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<tr>
<td>FEB</td>
<td>24</td>
<td>Examination 1</td>
<td>To be announced</td>
</tr>
<tr>
<td>MAR</td>
<td>3</td>
<td>Chapter 7</td>
<td>Support Facility /Proc. flow</td>
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<tr>
<td>MAR</td>
<td>10</td>
<td>Chapter 8</td>
<td>Process Improvement</td>
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<tr>
<td>MAR</td>
<td>17</td>
<td>SPRING BREAK</td>
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<tr>
<td>MAR</td>
<td>24</td>
<td>Chapter 9</td>
<td>Service Encounter</td>
</tr>
<tr>
<td>MAR</td>
<td>31</td>
<td>Chapter 9 cont.</td>
<td></td>
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<tr>
<td>APRIL</td>
<td>7</td>
<td>Examination 2</td>
<td>Chapters 7, 8, and 9</td>
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<tr>
<td>APRIL</td>
<td>14</td>
<td>Chapter 10</td>
<td>Service Locations</td>
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<tr>
<td>APRIL</td>
<td>21</td>
<td>Chapter 11</td>
<td>Managing caps/demands</td>
</tr>
<tr>
<td>APRIL</td>
<td>28</td>
<td>Chapter 11cont.</td>
<td></td>
</tr>
<tr>
<td>MAY</td>
<td>7</td>
<td>Chapter 12</td>
<td>Managing waiting lines</td>
</tr>
<tr>
<td>MAY</td>
<td>14</td>
<td>Final Exam</td>
<td>Comprehensive 10, 11, 12</td>
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**EXAMINATION SCHEDULE (Estimated Schedule):**

- Exam #1, February 17, 2015, Chapters 1-6
- Exam #2, April 7, 2015, Chapters 7, 8 & 9
- Final Exam, May 14, 2015, Comprehensive plus Chaps 10-12.

**SYLLABUS CHANGES:** The instructor has made every effort to provide the students with an accurate syllabus. However, situations may arise during the semester resulting in changes in the information provided in this syllabus. If this occurs, the changes will be announced in class. If students miss a class, it is their responsibility to find out if any changes have been made.

E. Delbert Horton owns this syllabus and all lectures. Students are prohibited from selling (or being paid for taking) notes during this course to or by any person or commercial firm without the express written permission of the professor teaching this course.