1.0 COURSE DESCRIPTION

Lean Six Sigma Six Sigma techniques, introduced to industry in the late 1980's, use data-driven decisions to reduce defects, drive down costs and increase efficiency. This methodology focuses on minimizing process variation, thereby enabling the process to operate more smoothly and efficiently. Lean is a process that focuses on eliminating waste and streamlining operations. Lean Six Sigma combines the two processes, providing a powerful tool to make improvements in any process or business. In this course, students learn the history, context, and tools of Lean/Six Sigma and apply the process in a course project.

2.0 COURSE OBJECTIVES

2.1 Develop a broad understanding of Lean/Six Sigma principles and practices
2.2 Build capability to implement Lean/Six Sigma initiatives in manufacturing operations
2.3 Operate with awareness of Lean/Six Sigma at the enterprise level
2.4 Develop skills in problem solving and root cause analysis
2.5 Compare and contrast lean with the Theory of Constraints and Quick Response Manufacturing.
2.6 Define an appropriate Lean Six Sigma Project
2.7 Prepare the students for Green Belt Certification

3.0 COURSE REQUIREMENTS

- DSCI-232 (Business Statistics) DSCI-304 (Operations Management)

4.0 SCHOOL OF BUSINESS LEARNING GOALS

- **Goal 1: QUANTITATIVE FLUENCY.** Students will demonstrate competency in logical reasoning and data analysis skills solving problems related with quality control and statistical analysis. Assessment will take place in the exams and in the final project.

- **Goal 2: INTELLECTUAL INNOVATION AND CREATIVITY.** Students will be able to demonstrate their resource fullness and originality in addressing extemporaneous problems integrating their knowledge from multiple sources

5.0 COURSE EXPECTATIONS

As your teacher, I have the following responsibilities:

5.1 Come prepared to every class.
5.2 Plan my class so you can accomplish the objectives listed in the syllabus.
5.3 Treat you as responsible adults.
5.4 Consider that it is not always your fault if you do not understand the material.
5.5 Create a mutually respectful classroom environment.
5.6 Encourage you to ask and answer questions.

As students, you have the following responsibilities:

5.7 Come prepared to every class.
5.8 Complete all work on time with proper thought.
5.9 Behave as responsible adults.
5.10 Consider that it is not always my fault if you do not understand the material.
5.11 Treat others with respect.
5.13 Learn the statistics software outside the classroom with guidance from the professor during office hours (Excel).
5.14 If you are not familiar with excel, it is YOUR responsibility to do the Excel Review by yourself during the first days of class. You are expected at least to have this knowledge for the class.

6.0 COURSE TEXTS


6.2 Additional Reading


MORE PAPERS WILL BE GIVEN DURING THE SEMESTER

7.0 GRADING AND EVALUATION:

7.1 Exam 1 (14.2%)
7.2 Exam 2 (14.2%)
7.3 Exam 3 (14.2%)
7.4 Exam 4 (14.0%)
7.5 Exam 5 (14.2%)
7.6 Exam 6 (14.2%)
7.7 Quizzes/Assignments (15.0%) Every class students must be prepare for a quiz at the beginning of the class

<table>
<thead>
<tr>
<th>Grading Scale</th>
<th>Letter Grade</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>94-100</td>
<td>A</td>
<td>High Superior</td>
</tr>
<tr>
<td>90-93.99</td>
<td>A-</td>
<td>Superior</td>
</tr>
<tr>
<td>87-89.99</td>
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<td>Very Good</td>
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<td>84-86.99</td>
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<td>B-</td>
<td></td>
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<tr>
<td>77-79.99</td>
<td>C+</td>
<td>Fair Good</td>
</tr>
<tr>
<td>74-76.99</td>
<td>C</td>
<td>Fair</td>
</tr>
<tr>
<td>70-73.99</td>
<td>C-</td>
<td>Acceptable</td>
</tr>
<tr>
<td>67-69.99</td>
<td>D+</td>
<td>Barely Acceptable, Passing</td>
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<tr>
<td>63-66.99</td>
<td>D</td>
<td></td>
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<tr>
<td>60-62.99</td>
<td>D-</td>
<td></td>
</tr>
<tr>
<td>&lt; 60</td>
<td>F</td>
<td>Failure</td>
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<tr>
<td></td>
<td>WA</td>
<td>Withdrawn Excessive Absences (equivalent to F)</td>
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<tr>
<td></td>
<td>XXF</td>
<td>Failure due to Academic Dishonesty</td>
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8.0 TOPICS INCLUDED:

INTRODUCTION TO LEAN PROCESS
LEAN AND SIX SIGMA
SIX SIGMA (CERTIFICATION PURPOSES)
ENTERPRISE-WIDE DEPLOYMENT
PROCESS MANAGEMENT
TEAM MANAGEMENT
DEFINE
MEASURE DATA
MEASURE STATISTICS
ANALYZE
IMPROVE
CONTROL
DESIGN FOR SIGMA

Material in the slides it is only a professor guide for the class, you need to go over the material in the book in order to be prepare for your test

9.0 POLICIES AND PROCEDURE

Attendance Policies
It is important for you to attend, and to be on time for, each meeting of SCIM 366 because in-class time is important to ensuring full understanding of the material. Attendance is taken every class, and absences and tardiness are recorded. If you are more than 10 minutes late (excuse or unexcused) you will have 0.5 absence. Do not be physically present (excuse or unexcused) an absence will be registered

9.1 Students **are expected to attend classes**. You cannot expect to have a thorough grasp of the material if you miss class. You are responsible for all material or assignments that are covered in class. Students are expected to contribute to class discussion. Class participation, attendance and promptness are expected and highly encouraged. It is not acceptable to be regularly tardy for class. If you miss a quiz /in class assignment due to tardiness, you may not make it up.

9.2 Students **ARE ALLOWED TO MISS only 2 class (excuse or unexcused, understand that a physical absent is the act to do not be present in the class).**

9.3 For each additional absence (after 2) your final grade will be reduced by 5 points, **-excuse or unexcused-.**

9.4. **After five absences (excuse or unexcused) the student will be dropped from the class. NON-NEGOTIABLE.** You don’t have to come to the professor to excuse your absence, any absence counts for this rule!!!

9.5 Attendance will be taken randomly in different time periods of the class. If you are absent at the time of attendance signing, it is considered absence. If you come in late and the attendance has already been passed, you will be considered absent. **Don’t bother to justify your absence since both justified and unjustified absences count for this rule.**

**If you miss a session, the professor WON’T repeat the missed material on office hours,** it is your responsibility to read on your own and ask your classmates for missing concepts.

9.6 Use your two allowed absences wisely. If you know you have a commitment that require you to miss class, then plan accordingly so you do not exceed two absences during the semester. Please see your instructor (in his office) if you have an exceptional situation that requires you to exceed two total absences, such a severe or prolonged illness, medical or family emergency, sport commitment, everything MUST be presented to the instructor BEFORE your absence. After you miss the class, any justification will be allowed.

9.6 The professor does not process Instructor Withdrawals after the first evaluation for any reason.

9.7 **No makeup exams will be given.** It is impossible to make an equivalent exam without the student at either an advantage or disadvantage. If you miss an exam, with or without a legitimate excuse, you will have a zero for that exam. **This policy is non-negotiable.**

9.8 **No makeup quizzes will be given.** This policy is non-negotiable. If you registered late for the course and you missed any quizzes, you will have zero on those missing quizzes. The professor cannot wait until the last day to add/drop to start the class.
9.9 Extra credit or any special offers to increase student’s grades outside what is stated in this syllabus are a reward for those that actively participate in class. If you miss 3 or more absences, you accept that you will not be eligible for any extra credit or offers beyond the grade distribution stated in this syllabus.

10.0 SNAP STUDENTS/SPECIAL ACCOMMODATIONS/ATHLETES

Students approved for SNAP Services are instructed to meet with each of their professors during the first two weeks of classes or as soon as they are approved for services to discuss accommodations and present a copy of their SNAP-issued Professor Notification Letter (PNL). Though it is the student’s responsibility to initiate discussion regarding accommodations that may be needed, an announcement on your syllabus or in class encouraging them to do so would be helpful. Students will feel more comfortable about identifying themselves as having a disability if they are approaching someone they believe to be receptive to the discussion. Such an invitation can go a long way toward encouraging students with a disability to approach the instructor early in the course.

- Students that require special accommodations for exams or athletes must talk to the professor no later than ONE week after the semester start and provide necessary documentation.
- **SNAP students are responsible to remind the professor one week in advance before each exam to allow the professor enough preparation time.** If a student fails to remind the professor one week in advance before each exam, the student will have the same evaluation time as the rest of the class for that particular exam.
- **Center for Student Learning:** I encourage you to utilize the Center for Student Learning’s (CSL) academic support services for assistance in study strategies and course content. They offer tutoring, Supplemental Instruction, study skills appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at [http://csl.cofc.edu](http://csl.cofc.edu) or call (843)953-5635.

11.0 COLLEGE OF CHARLESTON HONOR CODE

All work that you submit in this course must be your own; unauthorized group efforts will be considered academic dishonesty. This is particularly important with regards to assignments and exams. The sharing or copying of program files (e.g., spreadsheets) is a form of plagiarism. Academic dishonesty is a serious offense, which may result in a failing grade for the course and/or report to the Honor Board for evaluation. If copying is involved, both parties will be judged equally guilty.

12.0 PROFESSIONAL BEHAVIOR GUIDELINES:

12.1 Tardiness: Please arrive on time. If you are later than the start of the class for three times in the semester, it will count as one missed class. If you are late in a quiz day, you have until the other students finish the quiz, the time will not start when you come into the classroom.

12.2 Side Conversations: Side conversations make it difficult for your classmates to actively listen and learn.

12.3 Sleeping: falling asleep in class is not considered professional behavior.

12.4 Inattention: Please don’t read other material (chat, browsing the web, books) or study for other courses during my class. It’s not polite. Please pay attention and join in the individual and group discussions. It will help you master the material.

12.5 Cell Phone: Please set your cell phone to silent mode while you are in the class. Cell rings can disturb your classmates as well as me. **If the professor catch you texting he have the right to ask you to leave the class.**

12.6 Printing: Do not print outside work during class. I will turn off the printer at the beginning of class to prevent any interruption to the class.

12.7 Navigating or other computer tasks different than class matters: It is not polite to be doing course work or assignments other than the ones required in class. Also, it is not polite to navigate internet or check email while in class. One point will be taken out from your final grade for every time you do this in class. If you finish your work before other classmates, you might ask for permission to do other work in the computer and until given, you should not do other work.

13.0 MISCELLANEOUS POLICIES:

13.1 Although I will try to maintain the class schedule and objectives, I may need to make adjustments. You are responsible to check OAKS CALENDAR for the most recent calendar of activities and dates. Don’t ask the professor about quizzes or exams dates, since she will not give you as accurate information as the OAKS Calendar.
13.2 I do not give additional projects to increase one’s grade before or after the exam(s). The professor does not round grades; a 59.9 total grade is an F.

Complaints about Exams

13.3 The professor encourages students to review in detail when exams are returned. You have two days after the graded evaluation was given to you to make any questions or complaints about it. If that time is passed, it means you have accepted the grade given.

13.4 No complaints are accepted for any reason if the two days period has passed (non-negotiable)

13.5 No Office Hours the TEST Day