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 CQPA 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.
5.14 Learn the statistics software outside the classroom with guidance from the professor during office hours (Excel).
5.15 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:

Each student will take three exams that will be a combination of multiple choice, short answer. All exams will be closed book, unless the instructor specifically states otherwise.

7.1 Exam 1’ 22.5% (01/28/2021)
7.2 Exam 2’ 22.5% (03/02/2021)
7.3 Exam 3’ 22.5% (03/30/2021)
7.4 Exam 4’ 22.5% (04/20/2021)
7.5 Class Participation 10.0%**

* The exams are subject to change due to special factors; the teacher has the right to change this date 5 days in advance
** Class participation is an important aspect of student learning. When students speak up in class, they learn to express their ideas in a way that others can understand. When they ask questions, they learn how to obtain information to enhance their own understanding of a topic, attendance it is considered important part of class participation.
8.0 TOPICS INCLUDED:

- Quality Concepts
- Teams & Training
- Problem Solving
- Data Collection & Analysis
- Sampling & Measurement
- SPC & Statistical Analysis
- Customers & Suppliers
- Corrective & Preventive Action

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

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. Do not be virtually 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 virtually 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. **Do not 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. Remember that classes are recorded, the ability to take attendance is easy for the instructor.

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 will be given. **This policy is non-negotiable.** If you registered late for the course and you missed any test, you will have zero on those missing tests. 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 2 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

Disability Statement: Any student eligible for and needing accommodations because of a disability is requested to speak with the professor during the first two weeks of class or as soon as the student has been approved for services so that reasonable accommodations can be arranged. For more information, visit the disability services website: http://disabilityservices.cofc.edu/

Center for Student Learning: The Center for Student Learning’s (CSL) academic support services aid in study strategies, speaking & writing skills, and course content. Services include 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 or call (843) 953-5635.

Mental & Physical Wellbeing: At the college, we take every student’s mental and physical wellbeing seriously. If you find yourself experiencing physical illnesses, please reach out to Student Health Services (843.953.5520). And if you find yourself experiencing any mental health challenges (for example, anxiety, depression, stressful life events, sleep deprivation, and/or loneliness/homesickness) please consider contacting either the Counseling Center (professional counselors at http://counseling.cofc.edu or 843.953.5640 3rd Robert Scott Small Building) or the Students 4 Support (certified volunteers through texting "4support" to 839863, visit http://counseling.cofc.edu/cct/index.php, or meet with them in person 3rd Floor Stern Center). These services are there for you to help you cope with difficulties you may be experiencing and to maintain optimal physical and mental health.

Food & Housing Resources: Many CofC students report experiencing food and housing insecurity. If you are facing challenges in securing food (such as not being able to afford groceries or get sufficient food to eat every day) and housing (such as lacking a safe and stable place to live), please contact the Dean of Students for support (http://studentaffairs.cofc.edu/about/salt.php). Also, you can go to http://studentaffairs.cofc.edu/student-food-housing-insecurity/index.php to learn about food and housing assistance that is available to you. In addition, there are several resources on and off campus to help. You can visit the Cougar Pantry in the Stern Center (2nd floor), a student-run food pantry that provides dry-goods and hygiene products at no charge to any student in need. Please also consider reaching out to me if you are comfortable in doing so.

Inclement Weather, Pandemic or Substantial Interruption of Instruction: If in-person classes are suspended, faculty will announce to their students a detailed plan for a change in modality to ensure the continuity of learning. All students must have access to a computer equipped with a web camera, microphone, and Internet access. Resources are available to provide students with these essential tools.

OAKS (for all instructional modalities), including Gradebook, will be used for this course throughout the semester to provide the syllabus and class materials and grades for each assignment/exam, which will be regularly posted.

Recording of Classes (via ZOOM): Class sessions will be recorded via both voice and video recording. By attending and remaining in this class, the student consents to being recorded. Reported class sessions are for instructional use only and may not be shared with anyone who is not enrolled in the class.

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**

[http://deanofstudents.cofc.edu/honor-system/studenthandbook/index.php](http://deanofstudents.cofc.edu/honor-system/studenthandbook/index.php)

Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved. Incidents where the instructor determines the student’s actions are related more to a misunderstanding will handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive an XXF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the XX to be expunged. The F is permanent. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.

Students should be aware that unauthorized collaboration—working together without permission— is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying from others’ exams, fabricating data, and giving unauthorized assistance.

Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete Honor Code and all related processes in the Student Handbook at [http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php](http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php)

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. Remember to put your microphone off during the class time. Also, avoid extra conversations during the class time.

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

12.4 Inattention: Please do not 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 catches you texting, he have the right to ask you to leave the virtual 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 Email is the official means of communication at the College. You should be reading all email you receive from the school, most especially if it is from me.

13.2 Although I will try to maintain the class schedule and objectives, I may need to adjust. You are responsible to check OAKS CALENDAR for the most recent calendar of activities and dates. Do not ask the professor about exams dates since she will not give you as accurate information as the OAKS Calendar (Or the syllabus).

13.3 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
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