

Old Dominion University
Batten College of Engineering and Technology
Department of Engineering Management & Systems Engineering
ENMA 614 Quality Systems Design

Instructor Contact Information

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Office Hours	M 4-7 PM and F 9 AM-12 PM, or by appointment
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Web site	http://www.odu.edu/~rkady
Research Interests	Emergency evacuation and preparedness modeling and simulation, system safety, occupational safety, behavior-based safety, ergonomics, human factors, and work measurements.

Required Material

Introduction to Statistical Quality Control, 6th Edition, Douglas C. Montgomery, ISBN 9780470422045. **Note: The textbook comes with a student version of the statistical software Minitab.**

ODU Catalog Description

Course Number	ENMA 614 Quality Systems Design
Lecture Hours	1910-2150
Location	Gornto 0204
Credits	3

Course Objective

This course is designed to provide students with an understanding of the principles of modern statistical methods for quality control and improvement. The focus of the course will be on engineering and management applications. An emphasis will be placed on utilizing Minitab as the primary illustrative software package for the course.

Exams

Exam I	30%
Exam II	30%
Final Exam	40%

Grading Criteria

A	A-	B+	B	B-	C+	C	C-	F
93-100	90-92.9	87-89.9	83-86.9	80-82.9	77-79.9	73-76.9	70-72.9	< 70

Course Schedule

Week	Date	Part	Chapter(s)	Note
1	1/12/09	1. Introduction	Chapters 1-2	
2	1/19/09	No class-MLK, Jr. Holiday		
3	1/26/09	2. Statistical Methods Useful in Quality Control and Improvement	Chapter 3	
4	2/2/09		Chapter 4	
5	2/9/09		Chapter 4	
6	2/16/09	EXAM I	Chapters 1-4	Take home
7	2/23/09	3. Basic Methods of Statistical Process Control and Capability Analysis	Chapter 5	
8	3/2/09		Chapter 6	
9	3/9/09	No class-Spring Holiday	N/A	
10	3/16/09		Chapter 7	
11	3/23/09		Chapter 8	
12	3/30/09	EXAM II	Chapters 5-8	Take home
13	4/6/09	4. Other Statistical Process-Monitoring and Control Techniques	Chapter 9	
14	4/13/09		Chapter 10	
15	4/20/09		Chapter 11	
16	4/27/09	5. Process Design and Improvement with Designed Experiments	Chapters 12-13	
17	5/4/09	FINAL EXAM	Chapters 9-13	Take home

Note: the course schedule is tentative and might change during the semester according to how the course evolves. The course contents are subject to change as well, depending on students' interests and progress.

Homework

Homework problems will be assigned but *not* collected for grading. It is important, however, to do the homework problems to practice for the exams. Some homework problems will be discussed in class, and students will be expected to have an active participation in the discussion/solution.

Attendance Policy

As per university policy, students are expected to attend classes. However, if for some reason a student should miss a class, it is the *student's responsibility* to inform themselves of any administrative announcements discussed during a session, and make-up any of the course material covered in the session. This is of particular importance as there will be work presented in the sessions that may not be covered adequately in the textbook. Please note however, that *the instructor reserves the right not to provide extensive information about what transpired in a class.*

Course Disclaimer

Every attempt is made to provide a syllabus that is complete and that provides an accurate overview of the course. However, circumstances and events may make it

necessary for the instructor to modify the syllabus during the semester. This may depend, in part, on the progress, needs, and experiences of the students.

College Classroom Conduct

The following standards are intended to define acceptable classroom behavior that preserves academic integrity and ensures that students have optimum environmental conditions for effective learning.

1. Students must turn off cell phones and pagers during class or have them set to vibrate mode.
2. Classes are expected to begin on time, and students will respect the time boundaries established by the professor.
3. Students must not engage in extraneous conversations during classes. Such acts are considered to be violations of the Code of Student Conduct.
4. Students will activate their Old Dominion email accounts and check them before each class. If the student chooses to have his/her messages forwarded to another account, it is the student's responsibility to take the necessary steps to have them forwarded.
5. Consumption of food and drink during class is prohibited, except when the professor has specifically approved of such acts.
6. Offensive language, gestures and the like are disrespectful and disruptive to the teaching-learning process.
http://studentservices.odu.edu/osja/ccc_pamphlet.pdf

Honor Pledge

I pledge to support the honor system of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member of the academic community, it is my responsibility to turn in all suspected violators of the honor system. I will report to Honor Council hearings if summoned." By attending Old Dominion University you have accepted the responsibility to abide by this code. This is an institutional policy approved by the Board of Visitors. Refer to Student Honor Council [<http://studentservices.odu.edu/hc/>]

Special Needs

In compliance with PL94-142 and more recent federal legislation affirming the rights of disabled individuals, provisions will be made for students with special needs on an individual basis. The student must have been identified as "special needs" by the University and an appropriate letter(s) must be provided to the course instructor. Provision will be made based upon written guidelines from the university "special needs students" resource office. All students are expected to fulfill all course requirements.

University Email Policy

The Old Dominion University email system is the official electronic mail system for distributing course-related Communications, policies, Announcements and other information. In addition, the University email user ID and password are necessary for authentication and access to numerous electronic resources (online courses, faculty WebPages, etc.) NOTE: Effective August 23, 2004, all student accounts will utilize MIDAS passwords. [<https://midas.odu.edu>]
<http://occs.odu.edu/accounts/studemail/index.shtml>

Withdrawal

A syllabus constitutes a contract between the student and the course instructor. Participation in this course indicates your acceptance of its teaching focus, requirements, and policies. Please review the syllabus and the course requirements as soon as possible. If you believe that the nature of this course does not meet your interests, needs or expectations, if you are not prepared for the amount of work involved or if you anticipate that the class meetings, assignment deadlines or abiding by the course policies will constitute an unacceptable hardship for you, you should drop the class by the drop/add deadline, which is located in the ODU Schedule of Classes.

Student Acknowledgement

I, _____, have completely read this syllabus and understand and agree to the course requirements.