

SIE 330R: Engineering Experiment Design (Spring 2020)

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Please always contact me via email first, phone call / skype may be arranged if necessary.

Course Description: Design and analysis of experiments employing numerical and graphical methods. Topics include hypothesis testing, simple comparative tests, factorial designs, ANOVA analysis.

Prerequisites: Basic engineering probability and statistics.

Course objectives:

The principal objective of this course is for students to understand, recall, and apply the basic principles of designing and analyzing engineering and scientific experiments.

Textbook:

Montgomery, D. (2013), Design and Analysis of Experiments, 8th ed., John Wiley and Sons.

This book is online and available to all registered UA students. To access, go to UA library website <http://new.library.arizona.edu/>, search for the book title. Identify the correct version (8th), click the link after “Full text available at:”.

Course Website:

All course materials (lecture slides, video lectures, homework assignments, etc.), grades and other pertinent course information will be posted on the course’s D2L website from <http://d2l.arizona.edu>. Students must regularly visit the D2L site.

Attendance Policy:

Attendance is required. Students are responsible for the materials covered if missing a class.

Homework Policy:

HW will be assigned throughout the semester, usually following the completion of course chapters. All HWs should be submitted to the corresponding folder under “Assignments” **on D2L website by 11:59 PM on the due date (your local time)**. Except for medical reason (doctor’s proof needed), penalty for late submission is:

- 1) Submission on the 1st day after due date: 15%
- 2) Submission on the 2nd day after due date: 30%
- 3) Submission on the 3rd day or later: 100%

Project Policy:

There will be a team-based course project. Members in the same team will receive the same project score. For project details, refer to the separate **Project Description** document. The penalty for late submission is the same as Homework.

Grading:

Assessment	Percentage
Midterm Exam	20%
Final Exam	30%
Homework	20%
Project	30%

The total score is 100. The lowest score to pass the course is 60/100. Grades may be curved at the instructor's discretion.

Code of Academic Integrity:

Graded work must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See: <http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity>.

There is zero tolerance towards plagiarism and any act of intellectual dishonesty.

Subject to Change Statement:

Information contained in the course syllabus, except grading policy, may be subject to change with advance notice, as deemed appropriate by the instructor.