

**SIE 330R: Introduction to Design of Experiments**  
**Spring 2019**

Class Hours: Tuesdays and Thursdays 12:30PM - 1:45PM

Classroom: AME building, S212

Instructor: Allan T. Mense, Ph.D., PE, CRE, [atmense@email.arizona.edu](mailto:atmense@email.arizona.edu)

TA: Amir Mohammad Esmaieeli Sikaroudi [amesmaieeli@email.arizona.edu](mailto:amesmaieeli@email.arizona.edu)

Office Hour: Instructor (Tues 2:00-3:15PM AME Bldg Café or by appointment)  
TA (TBD)

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

**Prerequisites:** SIE 305.

**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.

Kowalski, S.M. & Montgomery, D., Minitab Manual for Design and Analysis of Experiments , 8<sup>th</sup> Ed., John Wiley and Sons.

**Course Website:**

Course material, announcements, grades and other pertinent course information will be posted on the course's D2L website. Students must regularly visit the D2L site.

**Attendance Policy:**

Attendance is required. Some in-class materials will not be available on slides / textbook, but will be included in exams. 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 **on D2L by 11:59 PM on the due date**. Penalty for late submission is:

- 1) Submission on the second day after due date: 15%
- 2) Submission on the third day after due date: 30%
- 3) Submission on the fourth day or later: 100%

**Project Policy:**

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 Exams (2)	30%
Final Exam	30%
Homework	20%
Project	20%

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.