

3. Course Syllabus, Schedule, Delivery Mode

Completely randomized designs, randomized complete and incomplete block designs, factorial and fractional factorial designs, Latin square designs, hierarchical designs, random and fixed effect models.

Learning Outcomes

To become familiar with the use of different statistical experimental designs, and to be able to perform detailed statistical analyses in connection with standard designed experiments.

Table of Contents and Schedule

1. Introduction
2. Completely randomized designs
3. Randomized complete and incomplete block designs
4. Latin square designs
5. Factorial and fractional factorial designs
6. Hierarchical designs
7. Random and fixed effect models

Key Sessional Dates

Classes begin: September 7
Non-Instructional Day: September 29
Thanksgiving Holiday: October 9
Reading Week: October 30-November 5
Classes end: December 8, 2021

Contingency plan

Although the intent is for this course to be delivered in person, should any university-declared emergency require some or all of the course to be delivered online, either synchronously or asynchronously, the course will adapt accordingly. The grading scheme will **not** change. Any assessments affected will be conducted online as determined by the course instructor.

4. Course Materials

Textbook:

1. Design and Analysis of Experiments, by D. C. Montgomery, 10th Edition. John Wiley
2. Statistics for Experimenters, Design, Innovation and Discovery, 2nd edition by George E. P. Box,

receive an incomplete (INC) in the course grade. The student will get assessment from the next time the course is offered.

6. Accommodation and Accessibility

Religious Accommodation

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling

8. Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: <https://www.uwo.ca/sci/counselling/>.

Students who are in emotional/mental distress should refer to Mental Health@Western (<https://uwo.ca/health/>) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at

http://academicsupport.uwo.ca/accessible_education/index.html

if you have any questions regarding accommodations.