STAT4504 Course Outline

This is an **Asynchronous** course - an online course where the instructor and students share information, ideas, and learning experiences in a virtual course space. While there is a scheduled time associated with the course for registration, students can move through course material on their own schedule. Please try also to hold the class time for possible Zoom or Teams meetings to discuss topics and ask questions.

Class time: Thursdays 5:35 pm-8:25 pm Jan. 14-April 8, 2021
Labs start the week of January 18.

I**nstructor**:   Dr. Shirley Mills
                       5203 Herzberg Bldg.,
                       Phone: 613-825-0480 (home)
                       Email: smills@math.carleton.ca
                       Webpage: math.carleton.ca/~smills

Office hours: via Zoom (TBA)

Topics:
The course will consider the design and analysis of experiments, including the theory and application of completely randomized, randomized block, latin squares, incomplete block, factorial and fractional factorial designs, nested and split plot designs. Emphasis will be placed on the statistical analysis of these designs with real-world examples.
SAS and/or Minitab will be used for analysis.

Text:
Design and Analysis of Experiments, 10th Ed. by Douglas Montgomery, John Wiley and Sons Inc.,
  Term: 4 assignments @10% each....40%

                Take-home Final exam.........60%

Notices:

1. You need a computer that can run some version of SAS (SAS University is free and online) and/or Minitab and preferably a webcam/mic to participate in labs and discussions. Notes, sample code, and videos will be posted, along with a suggested weekly pace but students may work at their own pace. Please do not try to cram – there is a lot of material and it builds upon earlier material in the course so please follow the order of presentation. If you do not understand something, ask the TA or contact me via email or phone.
2. Communication of course material will be via CuLearn as well as Zoom or Teams.
3. Students MUST send email from their Carleton email accounts for all course-related correspondence. Responses generally will be the same day.
4. Late assignments are NOT accepted unless you have received prior authorization from me. In that case, I will advise you how and by when to submit material for grading.

Other info and resources:

1. Classes start the week of January 11 and end the week of April 5, 2021..
Beyond this, I refer you to the official listing of academic dates for the details on
holidays, the Fall Break, etc. http://calendar.carleton.ca/academicyear/

2. For Academic Regulations:
Please refer to
https://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/

3. For Academic Accommodation:
Please refer to https://calendar.carleton.ca/search/?search=academic+accommodation
You may need special arrangements to meet your academic obligations during the term.
For an accommodation request, the processes are as follows:
   a. Pregnancy obligation: Write to me with any requests for academic
      accommodation during the first two weeks of class, or as soon as
      possible after the need for accommodation is known to exist.
   b. For students with disabilities:Please refer to
      **https://calendar.carleton.ca/undergrad/regulations/academicregula
      tionsoftheuniversity/regulations-for-students-with-disabilities/**
   c. For students with Religious obligations: Please refer to
      https://calendar.carleton.ca/undergrad/regulations/academicregulationsofthe
      university/regulations-for-students-with-religious-obligations/

4. Students wishing to see their examination papers must make an appointment within one
   week of the examination results being posted; it is not an opportunity to argue about the
   marking!

5. Academic Integrity:
   Please refer to
   http://www2.carleton.ca/senate/ccms/wp-content/ccms-files/academic_integrity_policy-
   21.pdf

6. Please note that all course materials are protected by copyright. You may make a copy
   for your own use but **you may not sell or distribute these materials** without prior
   written consent.

7. **TA opportunities** within the School for future terms. Information on how to apply can
   be found on our School web page. In hiring undergraduate TAs, the priority shall first be
   given to students who have passed some of the following Honours courses: MATH
   1002, 1102, 2000, 2100, STAT 2655, 2559 with grades A- or better.