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**STAT 2559** – Basics of Statistical Modeling  
*WINTER 2020*

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**Instructor** Dr. Jason D. Nielsen

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**Office Hours** Monday 15:00-16:00 or by appointment

**Text** *Mathematical Statistics with Applications*, 7<sup>th</sup> Edition  
Dennis Wackerly, William Mendenhall and Richard L. Scheaffer

**Lectures** Monday and Wednesday 13:05-14:25 in SA 406

**Lab** Beginning on Jan. 15  
A1: Wednesday 14:35-15:25 in HP 3393  
A2: Wednesday 15:35-16:25 in HP 3393

**Grading** Assignments: 24 %  
Labs: 6 %  
Term Tests: 20 %  
Final: 50 %

In order to **pass the course** you must obtain a cumulative mark of **at least 50%** and **no less than 40%** on any one of the above components.

**Assignments** Four assignments will be passed out and handed in during lectures. Due dates will be announced in class and posted on cuLearn.

**Term Tests** Term tests will be given in class on:  
- Monday Feb. 10  
- Monday Mar. 9  
a **non-programmable calculator** may be used.

**Final** A cumulative final will be given during the examination period (TBA).

### Course Outline

The course will consider concepts, techniques and methods used in descriptive and inferential statistics. Topics to be covered may include graphical and numerical summaries, the Central Limit Theorem, estimation and properties of estimators, confidence intervals and hypothesis tests for a population parameter and for the comparison of two populations, chi-square tests, contingency table analyses, analysis of variance, regression, and nonparametric procedures.

## **Academic Integrity Policy**

<https://carleton.ca/registrar/academic-integrity>.

## **Academic Accommodation**

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

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. For more details see the [Student Guide](#).

Religious 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. For more details see the [Student Guide](#).

Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or [pmc@carleton.ca](mailto:pmc@carleton.ca) for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website (<http://carleton.ca/pmc>) for the deadline to request accommodations for the formally-scheduled exam (if applicable).