	The University of Western Ontario Department of Statistical and Actuarial Sciences <b>STATISTICAL SCIENCE 2035 – 2018-19</b>							
	Instructor	Sec	Day/Time	Location	email	Office/Phone (519-661-2111)		
Γ	Mr. Steve Kopp	001 002	MWF 9:30-10:30 MWF 1:30-2:30	WSC 55 HSB 40	jraaymakers@stats.uwo.ca kopp@stats.uwo.ca	WSC 107		

Chapter	Topics
1 – Introduction (1 week)	Sections 1.1 to 1.4 – Statistical concepts; variables and data; data
	measurement
2 – Charts and Graphs (1 week)	Sections 2.1 to 2.4 – Frequency distributions; graphing categorical data; graphing measurement data; charts and graphs for two variables
<b>3 – Descriptive Statistics</b>	Sections 3.1 to 3.5 – measures of centre and spread; shapes of
(1.5 weeks)	distributions; boxplots
4 – Probability (2.5 weeks)	Sections 4.1 to 4.8 – introduction; unions and intersections; addition and multiplication laws; conditional probability; Bayes rule

**<u>Course Outline (with "approximate" length of time for each chapter):</u>** 

#### Midterm Exams (2.5 hour exams)

- 1. Exam 1: Friday, November 16, 2018 -- 7 pm to 9:30 pm (Topics TBA)
- 2. Exam 2: Friday, February 8, 2019 -- 7 pm to 9:30 pm (Topics TBA)

Each exam will cover only material since the start of classes (for Exam 1) or since the first exam (for Exam 2). Each exam will only consist of multiple choice questions. A formula page will be provided with each exam.

NOTE: There will be NO exam scheduled during the December exam period

### <u>Final Exam</u>

**Scheduled for the final exam period**. The final exam will be a 2.5-hour exam covering material ONLY since Midterm Exam #2. It will NOT cover the whole year, but only the last one third of the material. It will consist of multiple-choice questions. A formula page will be provided.

**Cellular phones, iPods, and other similar technology are** *not* **permitted in the exam room.** This means that cellular phones, iPods, and other similar technology **cannot** be used as a timekeeper/clock, calculator, or for any other purpose

You will also need a <u>non-programmable calculator</u> for all exams/in-class tests.

#### **In-class Quizzes** (for main campus sections 001 and 002)

There will be 8 (4 per term) short written answer question quizzes that will be given at the <u>very</u> start of class on the following **MONDAYS:** 

1	October 1, 2018	5	January 28, 2019
2	October 22, 2018	6	March 4, 2019
3	November 12, 2018	7	March 18, 2019
4	December 3, 2018	8	April 1, 2019

Quizzes will start right at the <u>start</u> of the class and you will have 15 minutes to complete the assigned questions – **do NOT be late for class on these dates; no extra time will be given** 

The quizzes will be DIFFERENT for each section of the course (they are not common quizzes, so you MUST go to the classroom of your official section on the day of the quiz) The quizzes will consist of 1 or 2 question (or perhaps one question with multiple parts) that will be based on material covered over the past 2-3 weeks of classes

### **Statistics Help Centre**

The help centre is a "drop in" centre and is located in Middlesex College (room number and hours will be posted on OWL once they are known). It will be staffed by TA's from the Statistics department. It is usually open from 10:00 to 4:00, Monday to Friday (starting 3<sup>rd</sup> week of September). This is an excellent resource for one-on-one help.

#### Course OWL Web Page

The web page will contain various things throughout the year:

- 1. A copy of this course outline
- 2. Copies of tests and exams from the previous year (with solutions)
- 3. Solutions to the exercises in the  $2^{nd}$  edition of the textbook (as pdf files)
- 4. Weekly updates and information about the course that you need to know
- 5. For some sections, daily class notes will be available (which will be incomplete to be filled in during the classes).
- 6. Marks of quizzes and tests as they are marked.

#### **Clicker Participation**

Clickers (or clicker technology on your smart phone/tablet/lap top) will be used frequently in lectures; be sure to bring yours to every class.

In class, I may ask a variety of structured questions to which you may respond by pressing the appropriate button on your respective clicker. Individual responses are collected and displayed as a graph at the front of the room which can lead to further discussion. These responses may also be saved for future analysis. In this course, clickers will be used primarily to promote engagement during lecture. They will also provide you with credit and feedback on your lecture preparation and/or participation.

We will not be using clickers for the first two weeks of classes in order for everyone to get settled in the course.

That will be followed by a week of "practice" questions using the clicker technology. These questions will not count towards your final mark, but instead it will be a chance for all of us to see if the clicker technology is working properly and to iron out any "bugs" in the system.

Then, about three weeks into the course, any clicker question given in class will count towards your final mark (see "Clicker MARKS" section for more detail)

The information below provides further details.

#### Clickers

Use your smart phone, tablet or lap top.

You will have to sign up for an account; this can be done either through the course OWL site (under the "iClicker" folder) OR through the iClicker website Information on how to set up an account is given on the course OWL site under the "iClicker" folder.

# Clicker Responsibility

It is your responsibility to ensure that your cell phone/tablet/lap top system is functioning properly.

If you have problems with the clicker system during a class, you may need to consult the ITS Help Desk at some point after class. It is <u>NOT</u> the duty of your instructor to fix any

# **Classroom Environment**

We have adopted a "Mutual Expectations" policy governing the classroom environment and all work submitted by students. [The full text of the policy can be found on the Statistical and Actuarial Science departmental web page, <u>http://www.uwo.ca/stats</u> or go directly to the web page: <u>https://www.uwo.ca/stats/undergraduate/mutual-expectations.html</u>].

#### **Attendance**

The department of Statistical and Actuarial Sciences views classroom attendance as a very important part of the learning process. You are expected to attend all classes. You are advised that excessive absenteeism may result in being debarred from the final examination.

## Policy on e-mail communication

E-mail can be an efficient and effective way to communicate with your Professor, but it should be <u>used very rarely</u>, only to provide us with information or to ask a question that requires a very brief response. We do not wish to see emails that ask "What did I miss in class today?". For more lengthy discussions, you should raise questions after class or during office hours, or make a separate appointment if necessary. Please remember that we will only read e-mails from your UWO student account. E-mails from other accounts (e.g. hotmail, yahoo, etc.) wil0 641.4 ff4 7e89mrit8I9 (f)-2 ( ne ne