BIOL 243/KNPE 251/NURS 323/PSYC 202 Online Course Syllabus

COURSE INFORMATION

Course Description

The purpose of this course is to improve your numeracy and critical thinking skills to help you make better decisions in both your personal and professional life. To achieve this, you will learn about probability, how to make sense of raw data, how best to describe data to others, and how to solve problems and test predictions using statistics.

This course follows a 'blended model', meaning that course material is provided using weekly online video lessons, a face-to-face lecture each week that goes into greater depth using case studies, and a face-to-face weekly tutorial where you learn to work with and analyze data. Drop in help sessions are available every week where students can come without appointment for assistance with any of the course material.

Key Dates

Sep 1	Tuition due
Sep 11	Classes start
Sep 22	Last day to add courses Last day to drop courses without financial penalty
Nov 3	Last day to drop courses without academic penalty
Dec 1	Classes end
Dec 7-21	Examinations

Learning Outcomes

After completing this course, students should have the knowledge and skills to do the following:

1. Identify the features of a data set to determine how best to summarize and display it.
2. Choose the appropriate statistical test and provide the rationale for selection.
3. Compute basic parametric statistical tests to test hypotheses.
4. Interpret the results of statistical tests and data software output to be able to draw valid conclusions.
5. Apply knowledge of statistics and research design (e.g., sampling) to critically evaluate research findings.

Course Materials

TopHat Software

At your earliest convenience, please register with the interactive teaching platform TopHat, which we will be using during lecture.

- Website: https://tophat.com/
- Cost: $26/4 months
- University name: Queens University
- Course name: **Intro to Statistics BL F2017**

There is no required textbook for this course. All course material will be available in onQ.

Third Party Software

This course makes use of TopHat for some activities. Be aware that by logging into the site, you will be leaving onQ, and accessing Tophatmonocle Corp's website and Top Hat. Your independent use of that site, beyond what is required for the course (for example, purchasing the company's products), is subject to THM's terms of use and privacy policy. You are encouraged to review these documents, using the link(s) below, before using the site.

https://tophat.com/legal/privacy/

Arts and Science Calculator Policy

Calculators acceptable for use during quizzes, tests and examinations are intended to support the basic calculating functions required by most Arts and Science courses. For this purpose, the use of the **Casio 991** series calculator is permitted and is the **only approved calculator for Arts and Science students**. This inexpensive calculator sells for around $25 at the Queen's Campus Bookstore, Staples and other popular suppliers of school and office supplies.

Timeline

The link to the Course Timeline is located in the navigation bar below the course banner. It shows all relevant course dates, including assessments, as well as links to other important course information. As dates may change, you should consult the Timeline each time you login to the course.

If there are discrepancies between dates in the course onQ site, the Timeline will be considered accurate.

All times are in Kingston Local Time.

Suggested Time Commitment

To complete the readings, assignments, and course activities, students can expect to spend on average, about **9** hours per week on the course.

Online Lessons	2-4.5 hours (as needed)
Lecture	1 hour
Tutorials	1.5 hours
Software Skills Primers	1 hour
Additional Practice	as needed
Drop-in Sessions	0-2 hours

COURSE ASSESSMENTS

Weighting of Assessments

Assessment	Location	Weight	Learning Outcomes	Content Elements
In-lecture participation via Tophat	Lecture	5%	1-5	videos lessons, Lecture
Software Skills Quizzes (Weeks 3, 6, 9)	Tutorial	8%	1-5	Software primer

Weekly Quizzes	On-line	10%	1-4	Videos lessons, Software primer
Tutorial Activities	Tutorial	15%	1-5	Incorporates all content
Inquiry-based Project	Tutorial/independent	12%	1-5	Incorporates all content
Term Tests (2 x 10%) (Weeks 6 & 10)	Lecture	20%	1-4	Video lessons, Lecture, practice problems
Final Exam (during final exam period)	TBD	30%	1-5	Video Lessons, Lecture, Module practice problems

Assessments and Activities Overview

Participation During Lectures

To facilitate interaction among students and professor during the weekly case-study lectures, we will use the online interactive teaching platform tophat (www.tophat.com). This will allow you to respond to questions and discussion points in lecture. Participation marks are awarded for both responding to tophat questions and for providing the correct answer to selected 'challenge' questions.

We recognize that there can be technical issues using TopHat in a lecture hall, or that you might miss a lecture due to illness. To accommodate these issues, we will drop your lowest 25% of your TopHat scores.

As an example: let's say by the end of the course there are 40 marks worth of TopHat questions that have been asked, and you've scored 25. However, you're concerned because you were sick for one lecture and your laptop had trouble connecting to TopHat during another. To provide everyone with leeway for these missed TopHat opportunities, we will mark your score out of 30, not 40. So your mark would be 25/30

= 0.833. This then gets multiplied by 5 (the total marks allocated to TopHat questions) to yield 4.16 marks.

Software Skills Quizzes (Weeks 3, 6, 9)

Software Skills quizzes will be during Weeks 3,6,9. These are timed quizzes taken at the start of tutorial that are designed to evaluate your skills in Microsoft Excel and R based on what you've been taught in the preceding tutorials. **As with all tutorial activities, you must be present in tutorial to take the quiz.**

- Quiz 1 (week 3) covers content from Software Guide weeks 1-3
- Quiz 2 (week 6) covers content from Software Guide weeks 1-6
- Quiz 3 (week 9) covers content from Software Guide weeks 1-9

Module Quizzes

There are 12 quizzes, each open for a week. The quizzes will consist of multiple-choice questions based on the weekly material from module videos, self-assessment and software guide (when applicable). The quiz will open midweek of each week and will be due early the following week (see Time Line for dates and times). You can take the quiz as many times as you like. Your highest mark will be recorded as your mark for the quiz.

Tutorial Activities

Tutorial Activities are performance-based activities designed to reinforce concepts from all aspects of the course. These activities are intended to help you see the utility of statistics in your respective discipline. An outline of each activity will be posted to onQ by the Monday before your tutorial. You must attend the same tutorial time each week. During the first 2 weeks of term, you can change your tutorial time on SOLUS if necessary. But after the 1st 2 weeks of class, you can no longer switch tutorial times for any reason.

Religious observances that conflict with your tutorial time must be declared by the end of January to In2Stats@queensu.ca

Inquiry-based Project

This project is designed to give you the opportunity to collect and analyze your own data on a topic that's of interest to you. The Teaching Assistants will give you detailed information about the project over the term, and you will have some tutorial time dedicated to working on the project.

Term Tests

The two term tests (2 x10%) will be written in Week 6 and week 10 (see the Timeline for exact dates). The first term test covers material Modules 1-4 and term test 2 covers materials from Modules 1-7 with emphasis on Modules 5-7. Term tests will be multiple choice and short answer. Each term test will include material from the modules videos, lectures, module practice problems and elements of the tutorials.

Proctored Final Exam

The Final Exam is three hours in length and includes multiple-choice and short answer questions based on the material from the entire Fall term, including all modules videos, lectures, module practice problems and elements of the tutorials. Exam dates: The specific dates for each exam will be announced later in the term by the Registrar's office. Once the exam schedule has been finalized the exam date will be posted on your SOLUS account.

Grading

All components of this course will receive numerical percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to Queen's Official Grade Conversion Scale:

Queen's Official Grade Conversion Scale

Grade	Numerical Course Average (Range)
A+	90-100
A	85-89
A-	80-84
B+	77-79

B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52
F	49 and below

COURSE COMMUNICATION

Contacting the Teaching Team

The teaching team contact information is located on the Homepage of the course (see “Teaching Team”).

For any questions about the course, from course material in the videos and study strategies to getting help with tutorial activities and exam prep, please come to the Drop-In Help Sessions. Each session is facilitated by one of your professors.

Please use the course email for inquires that are about the logistics of the course, such as where to find due dates, or where your exam is written. A Teaching Assistant will respond typically within 24hrs. Note, if you have questions about course material you should bring those to the help sessions.

Course email: In2Stats@queensu.ca

If you have academic accommodations, please submit your form to the 'Accommodations' dropbox on the home page. We will send you any information about the accommodation (such as alternative exam rooms) through the dropbox.

If you have missed an activity in the course (e.g., exam, quiz), please read the course policies and then submit the appropriate form through the 'Missed Activities' dropbox.

Course Feedback

At various points during the course, students will be asked to take part in a variety of feedback activities (such as questionnaires and exit tickets).

This feedback enables the team to make any adjustments necessary to improve the your learning experience. All surveys are anonymous, and directly related to activities, assessments, and other course material.

In addition to a pre-course activity/questionnaire, students will also complete a brief survey at the end of the term, providing insight into their experience of the course structure, including interactive elements, along with the technical support provided.

Netiquette

In any course you often communicate with your peers and teaching team through electronic communication. You are expected to use the utmost respect in your dealings with your colleagues or when participating in activities, discussions and online communication.

Here is a list of netiquette guidelines. Please read them carefully and use them to guide your communication in this course and beyond.

1. Make a personal commitment to learn about, understand, and support your peers.
2. Assume the best of others and expect the best of them.
3. Acknowledge the impact of oppression on the lives of other people and make sure your writing is respectful and inclusive.
4. Recognize and value the experiences, abilities, and knowledge each person brings.
5. Pay close attention to what your peers write before you response. Think through and re-read your writings before you post or send them to others.
6. It's ok to disagree with ideas, but do not make personal attacks.

7. Be open to be challenged or confronted on your ideas and challenge others with the intent of facilitating growth. Do not demean or embarrass others.
8. Encourage others to develop and share their ideas.

Queen's Email

The university communicates with students via Queen's email. Please check your email regularly to ensure you do not miss important information related to your course.

COURSE POLICIES

Copyright

The material on this website is copyrighted and is for the sole use of students registered in BIOL 243/KNPE 251/NURS 323/PSYC 202. The material on this website may be downloaded for a registered student's personal use, but shall not be distributed or disseminated to anyone other than students registered in BIOL 243/KNPE 251/NURS 323/PSYC 202. Failure to abide by these conditions is a breach of copyright, and may also constitute a breach of academic integrity under the University Senate's Academic Integrity Policy Statement.

Accessibility/Accommodations

Queen's University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities.

If you are a student with a disability and think you may require accommodations, you are strongly encouraged to contact the Queen's Student Accessibility Services (QSAS) as early as possible. For more information, including important deadlines, please visit the QSAS website at:
http://www.queensu.ca/studentwellness/accessibility-services/.

Students with course accommodations submit their form to the 'Accommodations' dropbox on the home page. We will send you any information about the accommodation (such as alternative exam rooms) through the dropbox.

Religious Accommodations
If you are unable to write an exam due to faith observance, please email In2Stats@queensu.ca to make alternate arrangements by September 30th, 2017.

Academic Considerations for Students in Extenuating Circumstances

The Senate Policy on Academic Consideration for Students in Extenuating Circumstances was approved in April, 2017. Queen's University is committed to

providing academic consideration to students experiencing extenuating circumstances that are beyond their control and which have a direct and substantial impact on their ability to meet essential academic requirements. The Faculty of Arts and Science is developing a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating circumstances, which will be posted on the Faculty of Arts and Science website in Fall, 2017.

Academic Integrity

Academic integrity is constituted by the six core fundamental values of honesty, trust, fairness, respect, responsibility, and courage (see www.academicintegrity.org).

These values are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University.

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see Academic Regulation 1), on the Arts and Science website (see http://www.queensu.ca/artsci/students-at-queens/academic-calendar), and from the instructor of this course. For current policy updates visit: http://www.queensu.ca/artsci/students-at-queens/academic-integrity

Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

Computer Requirements

<table>
<tr><td rowspan="3">Microsoft Windows Client

Vista/Windows 7/Windows 8
Intel Core 2 Duo processor
2GB RAM
Soundcard with speakers and microphone or preferably a headset
Webcam</td><td>Supported Browsers

Firefox (latest version)
Safari (latest version on 64-bit Intel processors only)</td></tr>
<tr><td>Java

Latest version</td></tr>
<tr><td>Internet Connection</td></tr>
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<tr><td rowspan="3">Mac Client

OS X 10.8 or higher
Intel i5 processor
2 GB RAM
Internal, USB or external iSight microphone or preferably a headset
Webcam</td><td>Wired high speed access: Cable or better (wifi is not recommended)</td></tr>
<tr><td>Media Player

Flash (latest version)</td></tr>
<tr><td>Adobe Reader

Latest Version</td></tr>
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Students Travelling Overseas

Students who will be out of Canada for any duration of the term should be advised that, in the past, students overseas have been blocked from accessing certain websites relevant to their courses, as well as onQ. If your course in requires the completion of online quizzes or exams, this may pose an impediment to you successfully completing the course. We do not make accommodations based on the lack of reliable Internet access. It is your responsibility to make sure that you will have adequate high speed Internet coverage for the entirety of the term.