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| YORK UNIVERSITYSchool of Administrative StudiesAP/ADMS 2320 3.0 Quantitative Methods I Fall 2019 – Section FDay: Thursday Time: 2:30-5:30pm Location: CLH J Instructor: Professor Henry Bartel Email: hbartel@yorku.caOffice hours: TBA |
| **Required Textbook:**KELLER, G., STATISTICS FOR MANAGEMENT AND ECONOMICS, 11th ed., Cengage Learning Pub ((c) 2018). **7th**, **8th, 9th and 10th edition is NOT SUPPORTED.**  |
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| **Lecture** | **Date** | **Topics** | **Readings** |
| 1  | Sept 5 | Introduction Graphical Descriptive Techniques I Graphical Descriptive Techniques II | Ch 1 Ch 2Ch 3 |
| 2  | Sept 12 | Numeric Descriptive Measures | Ch 4 |
| 3  | Sept 19 | Probability  | Ch 6 |
| 4  | Sept 26 | Random Variables & Discrete Probability Distributions  | Ch 7 |
| 5 | Oct 3 | Continuous Probability Distributions and Data Collection | Ch 8Ch 5 |
|  | **Sunday Oct 6** | **TERM TEST 1 (1.5 hours) – 6:00pm to 7:30pm** | **Coverage:****Chapters 1, 2, 3, 4, 6** |
|  6 | Oct 10 | Sampling Distributions and Introduction to Estimation | Ch 9 Ch 10 |
|  | Oct 17 | **NO CLASS – Reading Week** |  |
| 7 | Oct 24 | Introduction to Hypothesis Testing | Ch 11 |
| 8  | Oct 31 | Inference About a Population | Ch 12 |
|  | **SUNDAY Nov 3** | **TERM TEST 2 (1.5 hours) – 10:00am to 11:30am**  | **Coverage:****Chapters 5, 7, 8, 9 and 10** |
| 9  | Nov 7 | Inference About Comparing Two Populations  | Ch 13 |
| 10  | Nov 14 | ANOVAChi-Squared Tests | Ch 14 (parts)Ch 15 (parts) |
| 11 | Nov 21 | Simple Linear Regression (computer method)Multiple Regression | Ch 16 (parts)Ch 17 (parts) |
|  |  | **Common Final Examination****(DATE) (Date, time & location to be announced on registrar/university website)** | **Covers:****Chapters 10, 11, 12, 13, 14, 15, 16 and 17** |

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| **MARKING SCHEME:** |  |
| Term Test 1 | 25% |
| Term Test 2 | 25% |
| ParticipationFinal Exam | 5%45% |
| Total | 100% |

**CHAPTER COVERAGE:**

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| **AP/ADMS2320**  | **COURSE CONTENT** |  |
| Chapters 1 – 3 | No omissions |
| Chapter 4 | Omit: Least Squares Method: p. 114 (Cover in Ch 16) Coefficient of determination: p.120 (Cover in Ch 16) 4.5 Applications in Finance: Market Model: p. 125  |
| Chapter 5 | No omissions |
| Chapter 6 | No omissions |
| Chapter 7 | Omit: 7.2 Bivariate Distributions: p.209  7.3 Applications in Finance: p.218 7.5 Poisson Distribution: p. 232  |
| Chapter 8 | Omit: 8.3 Exponential Distribution: p. 268  8.4 Other Continuous Distributions: p 273 |
| Chapter 9 | Omit: 9.2a (Optional) Normal Approximation to the Binomial  9.2b Omitting the Correction Factor for Continuity |
| Chapter 10 | Omit: 10.2c (Optional) Estimating the Population Mean Using  the Sample Median |
| Chapter 11 | Omit: Probability of a Type II Error Calculation – Concept and theory still to be covered  |
| Chapter 12 | Omit: 12.3g Wilson Estimators: p. 406 12.4 Applications in Marketing: p. 412  |
| Chapter 13 | No omissions |
| Chapter 14 | Responsible for Section 14.1 only: p. 518-525 |
| Chapter 15 | Responsible for Section 15.1 - 15.3 only. |
| Chapter 16 | Omit: 16.6 Regression Diagnostics I: p. 670Responsible also for:  Least Squares Method from Ch. 4 (covered in chapter 16) |
| Chapter 17 | Omit 17.3 and 17.4 - Regression Diagnostics II and III |

**Course Description:**

An integrated approach to analyzing business problems from various functional areas. Practical business problems are analyzed using quantitative techniques including probability, statistical inference, estimation and regression as well as non-parametric approaches. Prerequisites: AP/ADMS 1000 3.00; one 12U mathematics course or equivalent. Course credit exclusion: AP/ECON 2500 3.00. PRIOR TO FALL 2009: Prerequisites: AK/ADMS 1000 3.00; one 12U mathematics course or equivalent. Course credit exclusions: AK/ADMS 2320 3.00, AK/ADMS 3320 3.00 (prior to Summer 2005), AK/ECON 3470 3.00.

**General Policy**

1. You are only allowed to attend lectures in which you are enrolled.
2. In case of a fire alarm, students are to get up instantly, collect their personal belongings and leave the building. (They should not wait until a Professor or an invigilator tells them to do so.)
3. You will not be allowed to write the Term Tests, or the Final Exam, unless you are on the class list / sign in sheet. **There will be no exceptions**. It is your responsibility to ensure that you are properly enrolled.
4. If you must miss a class, it is suggested that you try to obtain any missed notes from a classmate. NOT all class material will be available on the course website. Please note that you are responsible for everything discussed in class (whether mentioned/included in the textbook or not).
5. **You are not allowed to take pictures or record (audio or video) any content of the lecture.**
6. Concerns regarding marks will not be accepted after a week from the posting of the result, not from collecting the paper.
7. Due to unavoidable circumstances, if any lecture is missed, date for a make-up lecture will be announced on course web site.
8. Please ensure you read all documentation on the course website.

**Attendance**

1. From eleven lecture sessions, six sessions will be randomly picked for attendance.
2. Among those six Attendance five will be counted towards 5% worth (1% each). For example if you signed for attendance in four randomly picked sessions and missed two, you will achieve 4% out 5% for the attendance.
3. There is no alternative for the attendance.
4. Attendances can be taken any time during the selected lecture session.***During Attendance you are not allowed to leave the room even if you signed the sheet, unless it is completed.***
5. You might need to show your photo ID, if asked.
6. Once attendance is completed during the selected lecture session, No name will be added further.
7. There might be more than one attendance taken in one lecture. Your signature needs to be on both sheets for you to be counted as attended that class in full.

**Term Tests and Final Exam Policies**

1. Students are allowed to bring a reference/formula sheet, not to exceed 8½” by 11", of their own construction, following the guidelines below.  No restrictions on content.  No flaps; all pasted or taped on pieces must be properly glued or taped down on all four sides.

**Term Test 1 and 2:    1 side of an 8½” by 11" page
Final Exam:    2 sides of an 8½” by 11" page**
2. Students found with any of the following during a test/exam will be deemed to have unauthorized materials as defined in the University Policy on Academic Honesty:
* cellphones or other communication devices,
* personal information managers (PIMs),
* electronic dictionaries,
* user-programmable calculators
* pencil cases, unless a clear plastic bag
1. Students **MUST** write Term Tests and the Final Exams in the section they are registered in.
2. Students **MUST** mark their student numbers on the scantron sheet properly following the instructions provided.
3. There are two common Term Tests counting for 25% each towards the overall grade.
4. Both Term Tests and the Final Examination may consist of multiple choice questions and worded questions.
5. If a Term Test is missed, the weight of one, and only one, missed Term Test (25%) will be automatically (no documents such as doctor notes needed) transferred to the Final Examination. If both Term Tests are missed, the Final Examination will only weigh 70%.
6. The Final Examination will be comprehensive if any one of the two Term Tests is missed. That is, if a student misses one Term Test, he/she will be writing a Final Examination that includes material from the entire semester.
7. ***There are no alternative exam dates for Term Tests.***
8. If students miss the Final Examination and have to defer the exam, the deferred exam will be a cumulative examination.

**TUTORIALS:**

 **TBA – Will be posted on the course website.**

**RELEVANT UNIVERSITY REGULATIONS**

**Applicable to all ADMS and DEMS courses**

**Deferred Final Exams:**Deferred standing may be granted to students who are unable to write their final examination at the scheduled time or to submit their outstanding course work on the last day of classes. Details can be found at <http://myacademicrecord.students.yorku.ca/deferred-standing>

Any request for deferred standing on medical grounds must include an Attending Physician's Statement form; a “Doctor’s Note” will not be accepted.

DSA Form: <http://www.registrar.yorku.ca/pdf/deferred_standing_agreement.pdf>

Attending Physician's Statement form: <http://registrar.yorku.ca/pdf/attending-physicians-statement.pdf>

In order to apply for deferred standing, students must register at

<http://apps.eso.yorku.ca/apps/adms/deferredexams.nsf>

Followed by handing in a completed original Deferred Standing Agreement (DSA) form and supporting documentation directly to the main office of the School of Administrative Studies (282 Atkinson) and add your ticket number to the DSA form.  The DSA and supporting documentation must be submitted no later than five (5) business days from the date of the exam.  These requests will be considered on their merit and decisions will be made available by logging into the above mentioned link. No individualized communication will be sent by the School to the students (no letter or e-mails).

Students with approved DSA will be able to write their deferred examination during the School's deferred examination period. Deferred exams might take place during the regular exams period or in subsequent weeks depending on the course; precise dates are known when the Office of the Registrar publishes the final exam schedule of the term. No further extensions of deferred exams shall be granted. The format and covered content of the deferred examination may be different from that of the originally scheduled examination. The deferred exam may be closed book, cumulative and comprehensive and may include all subjects/topics of the textbook whether they have been covered in class or not.

 **NOTE:  To clarify the deferred standing final exam coverage, the deferred examination will be cumulative and cover all material for the semester.  This applies to all students writing a deferred Final Exam including those who wrote both Test 1 and Test 2.**

**Academic Honesty**: The Faculty of Liberal Arts and Professional Studies considers breaches of the Senate Policy on Academic Honesty to be serious matters. The Senate Policy on Academic Honesty is an affirmation and clarification for members of the University of the general obligation to maintain the highest standards of academic honesty. As a clear sense of academic honesty and responsibility is fundamental to good scholarship, the policy recognizes the general responsibility of all faculty members to foster acceptable standards of academic conduct and of the student to be mindful of and abide by such standards. Suspected breaches of academic honesty will be investigated and charges shall be laid if reasonable and probable grounds exist.

Students should review the York Academic Honesty policy for themselves at:

<http://www.yorku.ca/secretariat/policies/document.php?document=69>

Students might also wish to review the interactive on-line Tutorial for students on academic integrity, at:

<https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/>

 **Grading Scheme and Feedback Policy:**The grading scheme (i.e. kinds and weights of assignments, essays, exams, etc.) shall be announced, and be available in writing, within the first two weeks of class, and, under normal circumstances, graded feedback worth at least 15% of the final grade for Fall, Winter or Summer Term, and 30% for ‘full year’ courses offered in the Fall/Winter Term be received by students in all courses prior to the final withdrawal date from a course without receiving a grade, with the following exceptions:

*Note: Under unusual and/or unforeseeable circumstances which disrupt the academic norm, instructors are expected to provide grading schemes and academic feedback in the spirit of these regulations, as soon as possible .*For more information on the Grading Scheme and Feedback Policy, please visit: <http://www.yorku.ca/univsec/policies/document.php?document=86>

 **In-Class Tests and Exams - the 20% Rule**: For all Undergraduate courses, except those which regularly meet on Friday evening or on a weekend, tests or exams worth more than 20% will not be held in the two weeks prior to the beginning of the official examination period. For further information on the 20% Rule, please visit: <http://secretariat-policies.info.yorku.ca/policies/limits-on-the-worth-of-examinations-in-the-final-classes-of-a-term-policy/>

 **Reappraisals**: Students may, with sufficient academic grounds, request that a final grade in a course be reappraised (which may mean the review of specific pieces of tangible work). Non-academic grounds are not relevant for grade reappraisals; in such cases, students are advised to petition to their home Faculty. Students are normally expected to first contact the course director to discuss the grade received and to request that their tangible work be reviewed. Tangible work may include written, graphic, digitized, modeled, video recording or audio recording formats, but not oral work.  Students need to be aware that a request for a grade reappraisal may result in the original grade being raised, lowered or confirmed. For reappraisal procedures and information, please visit the Office of the Registrar site at: <http://myacademicrecord.students.yorku.ca/grade-reappraisal-policy>

**Accommodation Procedures:** LA&PS students who have experienced a misfortune or who are too ill to attend the final examination in an ADMS course should not attempt to do so; they must pursue deferred standing. Other students should contact their home Faculty for information. For further information, please visit: <http://ds.info.yorku.ca/academic-support-accomodations/>

 **Religious Accommodation**: York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents. For more information on religious accommodation, please visit:
<https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs>

 **Academic Accommodation for Students with Disabilities (Senate Policy)**

The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses. Provided that students have given sufficient notice about their accommodation needs, instructors shall take reasonable steps to accommodate these needs in a manner consistent with the guidelines established hereunder. For more information, please visit the Student Accessibility Services (formerly known as Counselling and Disability Services) website at [https://accessibility.students.yorku.ca](https://accessibility.students.yorku.ca/)

York’s disabilities offices and the Registrar’s Office work in partnership to support alternate exam and test accommodation services for students with disabilities at the Keele campus. For more information on alternate exams and tests please visit <http://www.yorku.ca/altexams/>

Please alert the Course Director as soon as possible should you require special accommodations.