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| A picture containing clipart  Description automatically generated | | | MCS3500  Marketing Analytics  Fall 2020  0.5 Credits | | | |
| General Course Information | | | | | | |
| ***Instructor:***  *Email:* | | | | Amirali Kani  akani@uoguelph.ca | | | |
| *Office Location* | | | | By Appointments | | | |
| *Office Hours* | | | | By Appointments | | | |
| *Department/School* | | | | Gordon S. Lang School of Business and Economics | | | |
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| Class Schedule: | | | | Section 1: Tuesdays, Thursdays, 02:30PM - 03:50PM, virtual room | | | |
| Pre-requisites: | | | | Section 2: Tuesdays, Thursdays, 08:30AM - 09:50AM, virtual room  10.00 credits including ECON\*1050, (MATH\*1000 or MATH\*1030), MCS\*2600, (1 of ECON\*2740, PSYC\*1010, STAT\*2060) | | | |
| Restrictions: | | | | This is a Priority Access Course. Some restrictions may apply during some time periods. | | | |
| Course Description | | | | | | |
| This course teaches students decision making theory and the methods of analysis that support decision making in the marketing discipline. Topics include customer, competitor and market analysis and methods such as forecasting and decision modeling. | | | | | | |
| Course Learning Outcomes | | | | | | |
| **Upon successfully completing this course, you will:**   L01: develop your ability to make decisions using analytical tools and sound research  L02: translate analytical findings into strategic making decisions  L03: become an intelligent user of available analytical tools and techniques  L04: be familiarized with R programming | | | | | | |
| Summary of Course Content and Materials | | | | | | |
| |  |  |  | | --- | --- | --- | | **Weeks** | **Module** | **Lectures and Exercises** | | Week 1 | **Introduction and Course Overview** | o Course Overview  o Introduction to R & Installation of R-Studio | | Week 2 | **Describing Data & Relationship between Variables** | o Describing Data  o Relationships between Continuous Variables  o Readings: Chapter 3 & 4 | | Week 3 | **Linear Regression Models** | o Substantive topic: Identifying Drivers of Outcome  (Response) Variables  o Methodology: Linear Regression Models  o Readings: Chapter 7 | | Week 4  . | **Reducing Data Complexity:**  Perceptual mapping and brand positioning | o Substantive topics: Perceptual Mapping & Brand Positioning  o Methodologies: Principal Component Analysis, Exploratory Factor and Multidimensional Scaling  o Readings: Chapter 8 | | Week 5 | | Week 6 | **Market Segmentation:**  Clustering and Classifications | o Substantive topics: Market Segmentation & Targeting  o Methodologies: Different Types of Clustering and Classifications  o Readings: Chapter 11 | | Week 7 | | Week 8 | | Week 9 | **Market Basket Analysis** | o Analysis of Market Basket or Transaction Data  o Metrics: Association Rules – Support, Confidence & Lift  o Readings: Chapter 12 | | Week 10 | | Week 11 | **Consumer Choice & Choice Modeling** | o Substantive Topics: New Product Design and Service; Product Modifications  o Methodologies: Choice Experiments and Choice Models  o Readings: Chapter 13 | | Week 12 | | | | | | | |
| Course Assessment | | | | | | |
|  | |  |  | | Associated Learning Outcomes | Due Date/ location |
| Assessment 1: | | 20% | Data Visualization and Linear Models | | LO 1 – 4 | *Week 3* |
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| Assessment 2: | | 20% | Perceptual Mapping and Brand Positioning | | LO 1 – 4 | *Week 5* |
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| Assessment 3: | | 20% | Market Segmentation and Targeting | | LO 1 – 4 | *Week 8* |
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| Assessment 4: | | 20% | Market Basket Analysis | | LO 1 – 4 | *Week 10* |
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| **Assessment 5:** | | 20% | Consumer Choice and Choice Models | | LO 1 – 4 | *Week 12* |
| Total | | **100%** |  | |  |  |
| In these assignments, we will replicate analysis using textbook data during class. You will be assigned to do similar analysis and provide insights using a different data sets (max. 3 students per group). | | | | | | |
| Teaching and Learning Practices | | | | | | |
| Lectures | Each week we will have a lecture style part where I will present the theories and concepts of the different marketing analytics tools, and a workshop style where I will demonstrate how to apply these theories and analytical tools to real cases and data. | | | | | |
| Course Resources | | | | | | |
| Required Text: Chapman, C. and Feit, E. M. (2019), R for Marketing Research and Analytics, 2nd edition, Springer.Recommended Text: Lilien, G. L., Rangaswamy, A. and De Bruyn, A. (2017), *Principles of Marketing Engineering and Analytics*, 3rd Edition, Decision Pro Inc | | | | | | |
| **Required Software**: R‐Studio (Freely available). <https://cran.r‐project.org/> and <https://www.rstudio.com/>  Data and R‐codes available at: <http://r‐marketing.r‐forge.r‐project.org/data.html> | | | | | | |
| Course Policies | | | | | | |
| Grading Policies Unless you have discussed an extension well ahead of the due date with the instructor, late penalties of 5% of the total grade earned per day (including weekends) will be assigned to any assessment (i.e. deducted from the total mark). Extensions will only be granted on the basis of valid medical or personal reasons, and need to be requested via email to the instructor as soon as possible. Late assignments will not be accepted once graded assignments have been returned officially to the class at large, unless circumstances permit and alternative arrangements have been made.  Students who find themselves unable to meet course requirements by the deadlines or the criteria expected because of medical or personal reasons, should review the regulations on academic consideration in the Academic Calendar and discuss their situation with the instructor, program counselor or other academic counselor as appropriate.  <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-grds.shtml>  Missed Assignments:  A grade of zero will be assigned if you fail to submit an assignment, unless you are ill or have other compassionate reasons. Please read your Undergraduate Calendar for the regulations regarding illness and compassionate grounds. Please note, vacation travel, moving house, or outside work commitments will not be accepted as valid reasons for missing deadlines.  If you have religious observances which conflict with the course schedule or if you are registered with Student Accessibility Services, please contact the course instructor in order to make arrangements for your assessment if appropriate. | | | | | | |
| University Policies | | | | | | |
| Academic Consideration When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for Academic Consideration: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml> | | | | | | |
| Academic Misconduct The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.  University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.  The Academic Misconduct Policy is detailed in the Undergraduate Calendar:  <https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml> | | | | | | |
| Accessibility The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact Student Accessibility Services as soon as possible.  For more information, contact SAS at 519-824-4120 ext. 56208 or email sas@uoguelph.ca or see the website: <https://wellness.uoguelph.ca/accessibility/> | | | | | | |
| Course Evaluation Information Please refer to the [Course and Instructor Evaluation Website](https://www.uoguelph.ca/ccs/learning-resources/instructional-research/course-evaluation) | | | | | | |
| Recording of Materials Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted. Drop date The last date to drop one-semester courses, without academic penalty, is December 4th, 2020**.** For regulations and procedures for Dropping Courses, see the Academic Calendar:  <https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml> | | | | | | |

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| **Date Submitted to Chair:** | 15/8/2020 |
| **Chair Signature (Approval):** |  |
| **Date Approved by Chair:** |  |