STA437/STA2005 - Methods for Multivariate Data

University of Toronto Winter 2019

Lectures: Monday 7-10pm at WB116
Instructor: Gun Ho Jang
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Office: EP103A
Office Hours: Monday 5:30-6:30pm or by appointments.

Course Description
This course deals with practical techniques for the analysis of multivariate data including most of the following topics: fundamental methods of data reduction with an introduction to underlying distribution theory; basic estimation and hypothesis testing for multivariate means and variances; regression coefficients; principal components and partial, multiple and canonical correlations; multivariate analysis of variance; profile analysis and curve fitting for repeated measurements; classification and the linear discriminant function.

Prerequisite
Introductory data analysis similar to ECO375/STA302/STA352 is mandatory. Linear algebra equivalent to APM233/MAT223/MAT240 is recommended. Advanced linear algebra equivalent to MAT224/MAT247 is highly recommended.

Textbook

Reference

Evaluation

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<thead>
<tr>
<th>Evaluation</th>
<th>Proportion</th>
<th>date, time and location</th>
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</thead>
<tbody>
<tr>
<td>Assignment</td>
<td>0%</td>
<td>3 5 sets</td>
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<tr>
<td>Term Test I</td>
<td>33%</td>
<td>Feb 4, 7-9pm, location: TBA</td>
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<td>Term Test II</td>
<td>33%</td>
<td>Mar 18, 7-9pm, location: TBA</td>
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<td>Final exam</td>
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Notes
* No makeup test will be given for missed mid-term tests. If you miss a mid-term test and provide a valid medical record to the instructor within a week, your mark on the final exam will be substituted for the missing test.
* Mid-term tests and final exam will be closed book with no aids allowed except a non-programmable calculator. Formulae sheets will be provided if necessary.
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1. Using or possessing unauthorized aids.
2. Looking at someone else's answers during an exam or test.
3. Misrepresenting your identity.

On assignments:
1. Using someone else's ideas or words without appropriate acknowledgement.
2. Submitting your own work in more than one course without the permission of the instructor.
3. Making up sources or facts.
4. Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

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