ISyE 3770R – Statistics and Applications  
Spring 2014

Catalog Description
Introduction to probability, probability distributions, point estimation, confidence intervals, hypothesis testing, linear regression and analysis of variance.

Prerequisites
Math 2401 or 2411 or 24X1 or equivalent.

Textbook

Instructor
Dr. Alexandre Locquet  
E-mail: alocquet@georgiatech-metz.fr  
Office 206

Lectures
MW, 11:00 am-12:30 pm.  
Class attendance is required. Any absence should be justified.

Teaching Assistant/Grader
TBA

Office hours (office 206)
TBA

Grading Policy

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>20%</td>
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<tr>
<td>Quiz 1</td>
<td>25%</td>
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<tr>
<td>Quiz 2</td>
<td>25%</td>
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<tr>
<td>Final Exam</td>
<td>30%</td>
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The quizzes and the final examination will be closed-book and notes. The final exam will be comprehensive.  
Any request for regrading of a quiz or homework assignment must be made within one week of getting the homework/quiz back.
**Important Dates**

<table>
<thead>
<tr>
<th>Quiz 1</th>
<th>TBA</th>
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<tr>
<td>Quiz 2</td>
<td>TBA</td>
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<tr>
<td>Last Day of Class</td>
<td>April 30</td>
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<tr>
<td>Final Exam</td>
<td>TBA</td>
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**Homework**

Problems will be assigned roughly once per week. Student collaboration on homework is permitted, but all work to be submitted should then be worked out and written up on your own. Of course, copying solutions from a Faculty solutions manual is cheating.

Homework should be turned in at the beginning of a class. Box all answers and staple all pages together! Homework turned in late loses 50%. Homework turned in two or more days late will not earn credit.

Procedure for turning in late homework: put it in my mailbox and send me an email as soon as you have done so.

An assignment might be due on the week before final exams (WBFE), and might be based on material covered during the WBFE.

**Topical Outline**

1. Probability Intro
2. Random Variables
3. Discrete Distributions
4. Continuous Distributions
5. Normal Distribution
6. Jointly-Distributed Random Variables and Correlation
7. Central Limit Theorem
8. Descriptive Statistics
9. Point Estimation
10. Confidence Intervals
11. Hypothesis Testing

**Honor Code**

Students are, of course, expected to abide by the [Georgia Tech Honor Code](https://www.gatech.edu/honor-code). Instances of academic misconduct will be viewed very seriously and reported to the Dean of Students.