Instructor: Esam Al-Sawi
Office: 5-310
Phone: 1887
E-mail: BlackBoard
Office Hours: UTR 11:15-12:30 OR by appointment

Textbook
Introduction to Linear Regression Analysis, by Montgomery, Peck and Vinning, 5-th edition.

Course Objectives
Present the basics of regression analysis.

Learning Outcomes: At the end of the term a student should be able to

- Find and interpret least square estimates of parameters
- Thoroughly understand and use the single linear regression model
- Thoroughly understand, build and use the multiple linear regression
- Perform hypothesis tests and construct confidence intervals in linear regression models
- Test the appropriateness of models, and analyze data

Important Notes:
• It is the student’s responsibility to observe the academic calendar for important dates.
• Only University issued excuses will be accepted and only within a week of return to class.
• Excessive Absences will earn you a DN in accordance with University rules.
• Check Blackboard regularly for announcements

Assessment

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<tr>
<th>Activity</th>
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<tr>
<td>Home Works (15%) + ClassWork (5%) (quizzes, attendance, bonus)</td>
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<tr>
<td>Exam 1 (Ch1+2+3+4)</td>
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<td>Exam 2 (Ch5+6+7)</td>
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<td>Project</td>
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<td>Final Exam (Comprehensive) (30%) Wednesday, 19 December 2018</td>
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Simple Linear Regression |  |
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3.3.4 Testing the General Linear Hypothesis |
| 7-8  | Chapter 4  
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|      | Exam 1 |  |
| 9    | Chapter 5  
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| 10   | Chapter 6  
Diagnostics for Leverage and Influence |  |
| 11   | Chapter 7  
Polynomial Regression Models | 7.3 Nonparametric Regression |
| 12   | Chapter 8  
Indicator Variables | 8.3 Regression Approach to ANOVA |
| 13   | Chapter 9  
Multicollinarity |  |
| 14   | Chapter 10  
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| 15   | Project Presentations |  |