UNIVERSITY OF NEVADA LAS VEGAS
Finance Department
FINQ 761 Financial Data Modeling I

Course Description and Objectives

This course will teach how to use statistical software to retrieve, organize, and analyze large financial databases to facilitate corporate financial decision-making. Examples of statistical software include Excel, SAS, and Stata. Examples of financial databases include Compustat, ExecuComp, and FactSet. In addition, a wide range of advanced statistical and econometric methods will be covered, such as univariate analysis, regression methods, panel data analysis, statistical prediction, and Monte Carlo simulation.

Course Prerequisite

Admission in MSQF program or approval by Director of MSQF program.

Course Materials

- Software: Excel, SAS, and Stata.
- Reading materials: Will be provided by the instructor. These materials will include case studies, software manuals, and academic research papers.

Keys to Success

- Class participation – I expect students to come to class and take an active role in discussions. To do so, you should read the assigned material before the date it is covered in class. This will both facilitate your learning and help you prepare for exams.
- Studying outside of class – Studying outside class is essential for you to succeed in this course. Practice makes perfect. There is no way around it.

Course Schedule

Modeling using Excel:
- Capital budgeting
- Sensitivity analysis
- Monte Carlo simulation
- Pivot Table

Modeling using SAS:
- Retrieving data from Compustat, ExecuComp, and other large databases.
- Manipulating large data sets using SQL and other techniques.
- Statistical and econometric analysis

Modeling using Stata:
• Summary and descriptive statistics
• Univariate analysis
• Linear regression analysis
• Non-linear regression analysis
• Selection models
• Instrumental variable regression
• Generalized methods of moments (GMM) regression

Finance topics to be covered:

• Financial-report analysis
• Executive compensation
• Corporate valuation
• Mergers and acquisitions
• Analyst forecast
• Event study

Exams and Grading

One midterm and one final exam (25% each) =50%
Assignments and projects =50%

Grading Scale

Course grades will generally be assigned as following:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>92 ~ 100</td>
<td>A</td>
</tr>
<tr>
<td>90 ~ &lt;92</td>
<td>A-</td>
</tr>
<tr>
<td>88 ~ &lt;90</td>
<td>B+</td>
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<tr>
<td>82 ~ &lt;88</td>
<td>B</td>
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<tr>
<td>80 ~ &lt;82</td>
<td>B-</td>
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<tr>
<td>78 ~ &lt;80</td>
<td>C+</td>
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<tr>
<td>70 ~ &lt;78</td>
<td>C</td>
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<tr>
<td>60 ~ &lt;70</td>
<td>D</td>
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<tr>
<td>Below 60</td>
<td>F</td>
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</tbody>
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• Midterm and final exams: Exams will be administered in-class and are individual assignments. The exams will be programming-based. The style of the exams will roughly follow the style of the practice assignments. My best advice on how to perform well on the exams is to attend class and work diligently on the practice assignments.
• Assignments and projects: The main goals of these assignments are to 1) reinforce concepts and techniques introduced in class; and 2) help prepare you for the midterm and final exams. You are free to collaborate on these assignments. I will post solutions to the assignments so that you may check your work. Late work will not be accepted.
• Make-up exams – Due to the nature of the course and exam, there will be no make-up exam. If you contact me prior to a mid-term exam and have a valid excuse with documentation to verify that excuse, I will add that mid-term’s grade weight to the final exam.
• Final grades – No incomplete grades will be assigned for marginal or failing grades at the end of the semester. There will be no extra credit work available to improve your final grade. Do not attempt to negotiate grades with me at the end of the semester.
• Grading errors – If you believe that any of your work is graded or recorded incorrectly, you may submit a written request (email is okay) for review within one week after the grade is posted. Any request after this time limit will not be considered.
• By enrolling in this class, you agree to the Department of Finance’s Academic Integrity Policy, which is available on the course website on WebCampus.

UNLV Policies

Academic Policies
Student Services & Activities
University Policies
University Community & Libraries