BRANDEIS UNIVERSITY
International Business School

ECON/FIN 291G - Quant Lab Seminar: Excel with VBA
Fall 2017 (10/31 – 11/31)

Instructor: Aldo Musacchio
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Sessions: Tuesdays 6.30 - 7.50
Office hours: By scheduled appointment

Course Description:
The primary objective of this course is to introduce students to Visual Basic Application (VBA) programming. VBA is the language used in all Microsoft Office’s software, but this course is going to focus on programming in Excel. Algorithms written in VBA are extremely useful when dealing with large or multiple datasets, when performing complex routines or to automate frequently used routines. By the end of the course, students should have mastered the basics of programming logic, be able to automate spreadsheets, develop basic subroutines and work with large databases. Also, students should develop enough programming skills to further advance their knowledge on their own.

Prerequisites:
Students taking this course should have basic notions of Excel, statistics and finance. Apart from that, the course is self-contained.
Students are supposed to bring their laptops to class. Note that this course will be taught using Windows, and some things may be different in Mac or Linux. Mac or Linux users who do not have Windows installed in their computer are advised to rent a computer at the Help Desk, as the course will not cover differences between operational systems.

Support Material:
This course uses tutorial videos from Lynda.com as preparation for classes. Students are supposed to watch the assigned tutorials before each session. The
videos used in this course are from a Lynda.com course named “Up and Running with VBA in Excel”. At the course schedule presented below, “S” stands for which Section of the course we are looking at, while “V” stands for which Video.

**Requirements and Evaluation:**
Students are required to attend all classes, do all the problem sets and be ready to discuss them in class, familiarize with and follow the policies on academic integrity (see below).
Successful completion of this course relies on the student’s performance on a final project, which will be assigned on the last session and is due one week later, at 11:59pm.

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**Academic Integrity:**
You are expected to be honest in all of your academic work. Please consult Brandeis University Rights and Responsibilities for all policies and procedures related to academic integrity. Students may be required to submit work to TurnItIn.com software to verify originality. Allegations of alleged academic dishonesty will be forwarded to the Director of Academic Integrity. Sanctions for academic dishonesty can include failing grades and/or suspension from the university. Citation and research assistance can be found at LTS - Library guides.

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**Accommodation for Disabilities:**
If you are a student with a documented disability on record at Brandeis University and wish to have a reasonable accommodation made for you in this class, please see me immediately. For more information go to: http://www.brandeis.edu/disability.
Course Schedule:

<table>
<thead>
<tr>
<th>Class</th>
<th>Date</th>
<th>Content</th>
<th>Pre-work</th>
<th>Work due</th>
<th>Homework</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Oct.31</td>
<td>Introduction to VBA, dimensioning variables, input and message box,</td>
<td>S1V1, S1V3 (until 0:55), S1V4, S1V5, S1V6,</td>
<td></td>
<td>Problem Set 1</td>
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<td></td>
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<td>basic syntax, programming mindset</td>
<td>S1V8 (until 1:00), S2V1 (until 1:10), S2V5</td>
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<td>and S6V3.</td>
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<tr>
<td>2</td>
<td>Nov.7</td>
<td>Conditionals and multiple conditions</td>
<td>S3V4</td>
<td>Problem Set 1</td>
<td>Problem Set 2</td>
</tr>
<tr>
<td>3</td>
<td>Nov.14</td>
<td>Iteration (Do While)</td>
<td>S3V2</td>
<td>Problem Set 2</td>
<td>Problem Set 3</td>
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<tr>
<td>4</td>
<td>Nov.21</td>
<td>Multiple iterations and matrices</td>
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<td>Problem Set 3</td>
<td>Problem Set 4</td>
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<tr>
<td>5</td>
<td>Nov.28</td>
<td>Useful commands: Macro recorder, ActiveX button, call function;</td>
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<td>Problem Set 4</td>
<td>Final Project</td>
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<td>Explanation of final project</td>
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**OBS:** After completing this course, students who want to advance their skills or learn more specific VBA skills can watch the remaining videos from “Up and Running with VBA in Excel” at Lynda.com and/or watch other courses such as “Excel VBA: Managing Files and Data” and “Process Modeling in Excel Using VBA”.

Version: August 20th, 2017