Instructor
Paul Nissenson, Ph.D.
Email: pmnissenson@cpp.edu
Phone: (909) 869-4608
Office Hours: M 2:00-3:00pm, Tu 1:00-2:00pm, W 9:00-10:00am in room 17-2630, or by appointment

Meeting Time and Location
M, 8:00-9:50am, room 17-2660

Prerequisites
Minimum grade of C (2.0) or better in MAT 114

Course Textbook
Optional: “Introduction to VBA for Excel (2nd Edition)” by Steven C. Chapra
Published by Prentice Hall

Grading
Online forums: 5%, (0.5% per post, up to 5%)
Homework: 10%, 5 assignments
Group project: 10%, Assigned 8th week
Quizzes: 20%, 7-8 quizzes (worst quiz dropped)
Midterm: 25%
Final: 30%

Homework problems and due dates are listed on the course website. Quizzes will be closed book and closed notes. Students will be allowed to write notes on a 8.5” × 11” sheet of paper for the Midterm and Final exams.

Each student’s letter grade for the course will be based on the following criteria:

<table>
<thead>
<tr>
<th>Total score</th>
<th>Approximate letter grade</th>
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<tbody>
<tr>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>80-90%</td>
<td>B</td>
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<tr>
<td>70-80%</td>
<td>C</td>
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<tr>
<td>60-70%</td>
<td>D</td>
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<tr>
<td>&lt; 60%</td>
<td>F</td>
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No late homework will be accepted under any circumstances unless a medical or family emergency occurred. Students absent to a quiz will receive a 0, but one quiz will be dropped. Students absent to the midterm who have a valid excuse (e.g., medical or family emergency) will have the weight of the midterm added to their final examination. Proof must be given to the instructor if an emergency prevents a student from turning in an assignment or taking an exam.
Course Outline
In ME 232, you will develop computational programming skills that can be used to solve engineering problems using Excel and Visual Basic for Applications. We will cover nine topics:
1. Introduction to Excel Workbook Environment
2. Introduction to VBA Environment
3. Data types & built-in functions
4. Modular programming I – Sub procedures
5. Modular programming II – Function procedures
6. Selective execution (If structures and Select Case structures)
7. Repetitive execution (Loops)
8. UserForms
9. Arrays

Learning objectives and activities for the each topic are listed on the class website.

Course Learning Objectives
By the end of this course, students are expected to gain the following abilities:
- Students will be able to input data and perform basic mathematical calculations within Excel spreadsheets.
- Students will be able to utilize fundamental programming concepts such as variables, modular programming, decision structures, repetitive structures, and arrays to develop VBA programs that manipulate Excel spreadsheets and perform basic calculations.
- Students will be able to comprehend the purpose and logic behind simple ready-made VBA programs, and will be able to predict the output of such programs.

Difference Between Flipped Class and Traditional Face-to-Face Lecture Class
I will be teaching this class in a flipped format. You will learn new material through only video tutorials. Additional help can obtained using internet searches, posting on the class discussion board, or by contacting the instructor. Class time will be dedicated to addressing topics that students have difficulty with and applying concepts to real-world problems.

Student’s Obligations
It is expected that students will complete the assigned reading and attempt all homework problems. If additional help with the material is needed outside the classroom, it is the student’s responsibility to attend the instructor’s office hours. Although computers will be used during lecture, students should not surf the web (unless it is directly related to the course) or use social media such as Facebook.

Academic Integrity
Academic dishonesty is a serious offence and includes:

1. Cheating on exams – Taking an action not allowed by the instructor such as using unauthorized reference materials, looking at another student’s exam, collaborating during an exam, text messaging, obtaining advance copies of exams, or having an exam re-graded after making changes.

2. Plagiarism – Intentionally presenting words, ideas, or work of others as one’s own work. While you are encouraged to study in teams, you are not allowed to copy any work that is not one’s own. You also may not turn in work completed in a previous class for credit in this class.

Depending on the severity of the offense, a failure of academic integrity may result in a referral to the Judicial Affairs Office, receiving an F in the course, and/or probation or expulsion from the California State University system.
Waitlist
Students who do not show up to any of the first week’s lectures without a valid excuse (e.g., personal emergency) will be dropped from the class. Students on the waitlist will be added on a first-come, first-serve basis.

Software Requirements
Microsoft Excel: You will be writing computer programs in the Visual Basic for Applications language, which is embedded in Excel. It is strongly suggested that you obtain Excel 2007 or later for Windows, or Excel 2011 or later for Macs.

Internet browser: Video tutorials and course information will be available on the class website. Firefox or Chrome are preferred.

PDF Reader & Microsoft Word: Instructions for homework assignments will be available on the class website in PDF format or Microsoft Word. You can obtain a free PDF reader at this site, http://get.adobe.com/reader/

If you encounter any technical problems during this course, please contact the Helpdesk at (909) 869-6776 and/or the instructor.

Additional Notes
1. Parts of this course are subject to change in order to meet the needs of the students currently enrolled.
2. Please let me know privately if you require assistance in this course.
3. If a student’s behavior is so disruptive that it affects other student’s ability to learn, he or she may be excused from the class.
4. You have one week to appeal grades.

Helpful Links
Disability Resources Center (DRC): http://www.dsa.csupomona.edu/drc/
Help Desk services: http://www.csupomona.edu/~ehelp/
Netiquette information: http://www.albion.com/netiquette/corerules.html
Judicial Affairs: http://dsa.csupomona.edu/judicialaffairs/academicintegrity.asp
University Library: http://www.csupomona.edu/~library/
Copyright information: http://www.csupomona.edu/~copyright/
<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction to Excel Workbook Environment</td>
</tr>
</tbody>
</table>
| 2    | Introduction to VBA Environment  
Development of macros |
| 3    | Data types |
| 4    | Modular programming – Sub procedures |
| 5    | Modular programming – Function procedures  
Variable scope |
| 6    | Flow control – Selective execution |
| 7    | *Midterm*  
Flow control – Repetitive execution |
| 8    | Custom dialogue boxes |
| 9    | Arrays |
| 10   | Putting it all together  
Work on group project |
| 11   | *Final Exam* (see class website for time) |