GSA 554 Spreadsheet Modeling for Accounting
Spring 2014
California Polytechnic State University
Orfalea College of Business

General Information

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Course Description

This course covers advanced topics in electronic spreadsheets and their use in accounting and financial applications. Students will learn how to develop spreadsheet models for data analysis and decision making. Students will also learn how to integrate automation tools and external data sources into spreadsheets.

Course Objectives

The specific objectives of GSA554 are for students to acquire the following skills and knowledge:

- Develop spreadsheet models for business and financial analysis;
- Understand and use appropriate functions and features in electronic spreadsheets to support decision making;
- Integrate external data sources into spreadsheet models;
- Integrate automation tools into electronic spreadsheets;
- Demonstrate the ability to use databases to analyze financial and auditing information

Required Course Materials

- **MS Excel 2013: Data Analysis and Business Modeling,** by W. Winston. Published by Microsoft Publishing. ISBN: 978-0-7356-6913-0
- **Coursepack: Cases & Tutorials for GSA 554:** This is a collection of cases and tutorials by Harvard and Ivey Publishing, available for purchase at El Corral Bookstore.
- In addition to the required materials listed above, there will be recommended online tutorials for each Excel topic posted on PolyLearn.

Grading

Grades will be determined based on performance on the following items. The weights are assigned as follows.

Mid-Term Exam:	30%
Final Exam (In-class):	25%
Final Exam (Take home):	15%
Attendance & Participation:	15%
Homework:	15%

Note: Do your own work. As a student at CalPoly, you have an obligation to abide by the university's honor code and the student computing policy. Any violation of this code will immediately be sent to the judicial board. Any plagiarism or cheating will result in an automatic failure (i.e., you will receive an "F" grade for the course).

Assignments

- **Midterm Exam:** The mid-term exam will test your grasp of important concepts as well as your ability to apply these concepts to business situations. The mid-term exam will be held during a regular class meeting and will be open-book and open-note.

- **Final Exam:** There will be two portions of the final exam: in-class and take-home. The in-class exam will follow the University's schedule on Tuesday, June 10th from 10am to noon. The take-home exam will be assigned on the last day of instruction (Thursday, June 5th) and will be due on Tuesday, June 10th before the in-class exam. This is an individual, not group, assignment--each student is to complete the exam on their own.

- **Reading Assignments:** Reading assignments will involve textbook chapters, cases, tutorials (both from the coursepack and online sources), and handouts related to the concepts introduced during class lectures. Each student is required to read the articles before class and actively participate in the class discussions.

- **Homework:** Homework will involve lab activities using Microsoft Excel. Homework assignments are to be completed individually, not in groups. Homework will be assigned approximately once a week and will be due the following week. The homework assigned on a Tuesday is due on the following Tuesday before class, and the homework assigned on a Thursday is due on the following Thursday before class.

- **In-class exercises**: In most class meetings, students will work in small groups on assignments related to the materials discussed during the week.

- **Class attendance and participation:** Students are expected to arrive on time and attend every class except for emergency. If a class is missed, it is the student's responsibility to obtain class notes, handouts, etc. Students are also expected to work on in-class exercises. Any use of emails, instant messengers, Internet, or materials not related to class work will result in a penalty reflected in your class participation grade.

Tentative Class Schedule (Subject to Change)

Week	Topics	Articles, Cases, & Tutorials	Chapters (Winston book)
Apr. 1 & 3	- Introduction - 'Art and craft' of constructing a flexible spreadsheet model (e.g., setting up a template reusable in different applications, evaluating an existing spreadsheet, ways to minimize errors in spreadsheet models) - Review basic spreadsheet skills	*"Facing the Problem of Spreadsheet Errors"* by Ray Panko (posted on PolyLearn) *"Electronic Spreadsheets: The Good, the Bad & the Ugly"* by Rick Hesse (posted on PolyLearn) *APPSHOP case* (coursepack)	Chapters 1, 2, 11, 13, 23, & 24
Apr. 8 & 10	- Building a spreadsheet model for financial analysis - Financial functions in Excel	*Williams Coffee Pub case* (coursepack)	Chapters 7, 8, & 9
Apr. 15 & 17	- Analysis and interpretation of financial statement data	*Harmonic Hearing case* (coursepack)	None
Apr. 22 & 24	- What-if and sensitivity analysis (e.g., Goal Seek) - Linear/Non-linear programming (e.g, Solver)	Exercise problems will be posted on PolyLearn	Chapters 17, 28 – 37
Apr. 29 & May 1	- Simulation	*Monte Carlo Simulation in Excel without using Add-Ins* tutorial (coursepack)	Chapters 66 - 76
May 6 & 8	- Spreadsheet audit functions in Excel	Spreadsheet Standards Review Board: http://www.ssrb.org/	Chapters 11 & 16
May 13 & 15	- Using external data sources in Excel – Part I: - Importing data from fixed width and delimited files - Importing/Linking data from relational databases - Linking Excel spreadsheets to external data sources *****Midterm exam on Thursday, May 15th*****	Data sets will be posted on PolyLearn	Chapters 1, 2, 3, 4, 19, 20, 25, & 38
May 20 & 22	- Using external data sources in Excel – Part II: - Introduction to markup languages (i.e., XML/XBRL) - Importing data from Web Services - Integrating XML/XBRL data into spreadsheet models	*How to Retrieve Data from the Web Into Excel* tutorial (coursepack).	Chapter 39

May 29	- Visual tools (e.g., charts, Pivot tables) - Analysis ToolPak add-in in Excel (if time permits) *****Tuesday, May 27th follows a Monday schedule*****	None	Chapters 23, 41 - 49.
Jun. 3 & 5	- Using Visual Basic for Application (VBA) to automate data analysis in spreadsheets ***** Take-home final exam will be assigned on Thursday, June 5th and will be due on June 10th before the in-class exam***** *****The in-class final exam is on Tuesday, June 10th from 10am to noon*****	- Variable, Logical Statements and Logical Operators in Excel VBA tutorial (coursepack) - Loops and Arrays in Excel VBA tutorial (coursepack)	None