



UniDev, LLC / West Coast Office
3415 S. Sepulveda Blvd., #875 Los Angeles, CA 90034
t.. 310.391.6440 f. 310.391.6671 www.unidevllc.com
Ehud G. Mouchly emouchly@runidevllc.com

**USC SCHOOL OF POLICY PLANNING AND DEVELOPMENT (SPPD)
MRED PROGRAM - SPRING 2008**

RED545: ADVANCED REAL ESTATE & FINANCIAL MODELING

PRELIMINARY SYLLABUS

Instructor: Ehud G. Mouchly
Location: TBA
Time/Dates: 9:00-5:00 on the following Saturdays:
January 26, February 23, March 29, April 26

1) Course Description and Objectives:

- a) This course is designed to give you a competitive edge by through training in efficient quantitative problem solving. We will focus on computerized modeling as an integral tool in decision making and deal structuring. The course will be of greatest benefit to those who already have experience in financial and real estate analysis by learning advanced interpretive and technical skills using computerized spreadsheets.
- b) The advanced nature of the course refers to the complexity of the problems that we will analyze and to the technical level of spreadsheet analysis and modeling. As a prerequisite to attending this course, you must have working knowledge of real estate accounting and finance. You should also have generalized spreadsheet skills, such as spreadsheet commands and functions, simple macros, use of range names, dynamic linking, etc.
- c) We will determine the instruction level of the course at the first meeting of the class. The level will depend on the range of registered students' demonstrated real estate finance and accounting knowledge, and modeling skill levels.

- 2) Class schedule. The following schedule is subject to the general level of knowledge and skills set of members of the class. The schedule is an [adjustable] program for the course that may change to be more or less advanced, as appropriate.



- a) 1st session:
 - i) "Why model?" Introduction to financial and real estate modeling;
 - ii) Class exercise to determine real estate accounting and finance knowledge and modeling aptitude of registered students. Revisiting the qualifying entrance test;
 - iii) Nuts and bolts of model building;
 - iv) Briefing on take-home assignment

- b) 2nd session:
 - i) Review of take-home assignment
 - ii) Dynamic relationships between absorption and lease-up, revenues and cost projections;
 - iii) Complex debt financing, including lender participation, subordination, etc.;
 - iv) Briefing on take-home assignment

- c) 3rd session:
 - i) Review of take-home assignment
 - ii) Joint venture / partnership structuring and deal modeling, including preferences and priority distributions between classes of partners;
 - iii) Modeling problems in land development, home-building and mixed-use projects;
 - iv) Presentation techniques;
 - v) Briefing on take-home

- d) 4th session:
 - i) Review of take-home assignment
 - ii) Systematic treatment of real estate portfolios;
 - iii) Systematic and inferential sensitivity analysis;
 - iv) Practical applications of computerized models: avoidance of overkill and underkill;
 - v) Utilization of internet and intranet networks for joint modeling by a project teams
 - vi) Briefing on take-home "Final."

(1) Please note: MRED students who are taking the "comp exam" may submit their project model as their "final," if pre-approved by the instructor.



3) Teaching Method

- a) The basic course format will be generating and working through real estate business models and case studies, including simulations, analytical calculations, identification of key analytic issues and inferential modeling. We will make time during class for discussion and hands-on Q&A.
- b) Our sessions will be in a workshop format combining lecture and interactive sessions devoted to skill-building in advanced real estate financial analysis, modeling, exercises and review of assignments. If you need remedial training in spreadsheet use and analysis this is not the place.
- c) Student-submitted case studies are encouraged. If yours is a particularly thoughtful and interesting project you will be allowed to substitute your project analysis in lieu of class assignments.

4) Prerequisites for Registered Students:

- a) Taking a qualifying test during the Fall 2007 semester;
- b) Successful completion of RED542 (or equivalent) and either successful completion or concurrent attendance in RED546 (or equivalent);
- c) A solid working knowledge of real estate financial analysis, understanding of real estate accounting, and spreadsheets use;

5) Auditing:

- a) Students who have taken the qualifying test but who have not been admitted as registered students may audit the class with instructor permission;
- b) Students who meet the above prerequisites may audit the class;
- c) Auditing students need not submit assignments. They will be asked to sit in the "peanut gallery." Registered students will have absolute priority in class discussions.

6) Hardware & software: All students must have a laptop / notebook computer in their possession. Joint work on a single computer in class will not be allowed. Microsoft Excel (Excel 2007) will be the spreadsheet of instruction. Some assignments will require use of Word and Powerpoint.

7) Communications: All students must have e-mail accounts capable of attaching and detaching, encoding and decoding binary files. All homework assignments and reviews will be handled only by e-mail.

8) Suggested / Recommended Readings



There is no mandatory textbook for this class. However, you will benefit by referring to appropriate sections in the following books and resources:

- a) Brueggeman & Fisher. Real Estate Finance and Investments. McGraw-Hill / Irwin
 - b) Peiser & Frej. Professional Real Estate Development. Washington: the ULI
 - c) Zuckerman & Blevins. Real Estate Development Workbook and Manual. Paramus: Prentice Hall
 - d) Zuckerman. Real Estate Investment and Acquisition Workbook. Aspen Law & Business Publishers
 - e) Carlberg, Conrad. Business Analysis with Microsoft Excel. Indianapolis: Que Corporation
 - f) Walkenbach, John. Excel 2007 Formulas. Wiley
 - g) Online training courses: <http://office.microsoft.com/en-us/training/CR100479681033.aspx>
- 9) Grading: A letter grade will be awarded to registered students, weighted as follows:
- a) 1/3, for class participation, including: real-time spontaneous solutions for modeling financial and real estate issues; suggestions for alternative solutions to modeling problems; demonstration of inferential thinking; application of theories learned in RED 542 and RED 546 or equivalent courses to real world problems.
 - b) 1/3, for demonstration of increased skill levels from session to session through take-home assignments;
 - c) 1/3, for "Final" take-home assignment. There will not be a final examination.



10) Disability Services and Programs:

Any student requesting academic accommodations based on a disability should register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open early 8:30 a.m. – 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.