ARCHITECTURAL PROBLEMS: SEMINAR
ARCH 691 (This syllabus is for MBA students)
Fall 2010

Professor William T. Cannady, FAIA
Professor of Architecture
T: 713-529-5177
Office: 207 AH
E-mail: wtc@rice.edu
Admin: Lauren Neatherlin
T: 713-348-5202

Professor Jefferson Duarte
Gerald D. Hines Associate Professor of Real Estate Finance
T: 713-348-6137
Office: 321 McNair Hall
E-mail: Jefferson.Duarte@rice.edu
Faculty Assistant: Morag Everill
E-mail: me3@rice.edu
T: 713-348-6726

Lectures: W 1:00-4:00 at McNair Hall 217. (See also calendar below)

1. Course Description

This course is offered with ARCH 601, which is 10-credit course offered for students of the Rice School of Architecture (RSA). (Please also see ARCH 601 syllabus.) This course offers the unique opportunity for MBA students to work with a team of architects on a development of given site. Groups of students are formed on the first day of classes. Each group is composed by RSA and by JGSB students. The groups have the challenge to identify the best use of the site and to produce development plans that are both economically and architecturally feasible. The RSA students are responsible for the design aspects of the development project, while MBA students are responsible for the financial and marketing aspects of the project.

This course aims to be useful to students interested in pursuing a career in real estate development. Students interested in real estate investments may also benefit from this course.

This course takes a “learning by doing” approach. Students are expected to take ownership of their project and to come up with ideas of their own. For this reason, instructors in this course assume the role of consultants that can provide feedback to students’ ideas. RSA students assume the role of project design architects, while the MBA students assume the role of project managers and are responsible for the market and financial analysis. Moreover, the course offers access to a series of professionals that specialize in many different areas of real estate. These professionals assume the role of clients and consultants. For a list of these professionals please see the attached addendum to this syllabus.
2. Course Objectives

After completing this course you should:

• Be able to understand the steps of the real estate development and appreciate the role of different members of a development team
• Understand the usefulness of a market study
• Be able to understand the trade-off between design and economic aspects of a project
• Be proud of your final development package!

3. Site, Target Return and Initial Economic Assumptions

Please see the addendum.

4. Prerequisites

Students need instructors’ approval to take this course.

5. Requirements and Grading

The course requirements consist of a development package composed by a detailed description of the project, a market analysis, and a financial feasibility analysis. Moreover, students will participate in four reviews.

5.1 Review 1

Students are expected to propose several (three has been the norm in previous years) preliminary development schemes on the first review. For each of these schemes, MBA students are expected to bring a document with the following items for the first review:

Preliminary program (square footage of each property type, the target tenants or clients for each property type), preliminary feasibility tests for each development scheme and site description

5.2 Review 2

Students are expected to have their programs finalized in this review. That is, students are not supposed to make major changes on the square footage of each property type after this review. MBA students are expected to bring a document with the following items for this review:

Site description, program, preliminary feasibility analysis, and a market analysis. The market analysis should contain a detailed description of the possible users of the space, of the demographics of the area surrounding the site, comparables and their rent or sales price (condos).

5.3 Review 3
Students are expected to have more detailed cost estimates on this review. MBA students are expected to bring a document with the following items for this review:

Site description, program, a market analysis, and feasibility analysis. The feasibility analysis should contain a detailed estimate of the construction costs, along with an estimation of the expected cash flows generated by the stabilize property. As part of the feasibility analysis, students are expected to define their investment holding period. In case, students decide to hold on to their developed properties, the feasibility analysis should be based on a 10-year cash flow proforma for the stabilized property.

5.4 Review 4 (Final Review)

Students are expected to send a PDF file with their final development package to Ms. Everill a few days before this review. (See calendar for exact dates.) Development packages are composed by: Site description, program, market analysis, feasibility analysis, and any architectural drawings that contribute to the description of their project. MBA students may also add a capital structure to their financial analysis if they wish. A common structure is composed by a permanent mortgage plus equity.

There are no rules with respect to what should be in the final development package. The list above is just a list of the minimum requirements. You could for instance perform a very extensive market analysis if you wish, or very detailed feasibility analysis. It is up to the students to decide how extensive their reports are. It is important however that the reports show a cohesive message and the data in the report support this message. For instance, if the data show an average rent of $1.5/s.f. per month for apartments, then the students should not assume a $2/s.f. per month rent in their feasibility analysis. Also, because these reports are distributed to the jurors in the final review, the reports should have at most 70 pages.

5.5 Course Grade

Your course grade is:

\[
(0.18 \times \text{first review report} + 0.18 \times \text{second review report} + 0.18 \times \text{third review report} + 0.18 \times \text{final review report} + 0.18 \times \text{presentation quality} + 0.1 \times \text{peer-evaluation})
\]

Sometime in the middle of the second term, students are expected to complete a peer-review form. Answers in this form will be used to compute a peer-evaluation grade which 10% of the student’s grade.

6. Rice Honor Code

The Rice Honor System ([http://www.ruf.rice.edu/~honor](http://www.ruf.rice.edu/~honor)) applies to all work in the class. For each item submitted for grading, please print and sign the entire honor code as follows (for team assignments, each member of the team should sign):

“On my honor, I have neither given nor received any unauthorized aid on this (examination, quiz or paper),”
7. Questions and Office Hours

Send us an e-mail if you have any questions. If you think that you will need extended help, please e-mail to make an appointment.

8. Comments and feedback

We welcome your feedback on every aspect of the course. If you would prefer to be anonymous drop a note addressed to professor Duarte in the drop box close to your mailbox in McNair Hall.

9. Academic Accommodations

To request academic accommodations due to disability, please contact Rice Disabilities Support Services in the Allen Center at 713-348-5841. Please, also contact me to discuss the accommodations you might need in this class. Additional information is available at http://www.dss.rice.edu

10. Laptop and cell phone classroom policy

It is the policy of the Jones School for students to place their laptop computer in the closed position while class is in session.

It is the policy of the Jones School for students to turn their cell phones off during class. If you cannot turn your cell phone off then put your cell phone in “vibrate” position and leave the classroom quietly if you receive a call.

11. Course Material

You will receive examples of development packages from previous years in the first class. These packages are good examples of what is expected from you but be aware that these packages have mistakes.

The recommended seminar text is Real Estate Development, 4th Edition by Mike E. Miles, Gayle Berens, Mark Eppli, and Marc A. Weiss, Urban Land Institute. This text serves as background reading for the course. Some of the material in the text will not be covered in lecture. Copies of this book are on reserve at the BIC and Fondren libraries.

You will also have access to the web site http://www.stdbonline.com/site/page/pg4554-pn_Home.html during the semester. This web site allows you to produce maps and reports displaying the demographics of the area surrounding the development site.

You may also use the GIS center at the basement of the Fondren library. GIS technology allows you to create maps displaying a wide array of information. These maps may be useful to refine and generate
your development ideas. For more information about the GIS center see
http://fondrenlibrary.rice.edu/about/hours/services/gdc/aboutgisdatacenter

You can access the course web page at https://owlspace-ccm.rice.edu/portal. The course web page will have a copy of the slides used in the seminars if the presenter makes them available. The course web pages will also have a copy of the up to date schedule and syllabus.

12. Course Schedule

Please note that this outline may change during the semester
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic &amp; Guest Speaker</th>
<th>Location</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-Aug</td>
<td>1-2: Professor Duarte: Syllabus and course organization</td>
<td>JGSB 217</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-3: Professor Cannady: Project Introduction and Design Methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3-4: Professor Duarte: Market Study and Initial Feasibility Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Sep</td>
<td>1-2: Guest Speaker – Scott Ziegler, AIA, Architect, Ziegler-Cooper</td>
<td>JGSB 217</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-3 Patty Bender - Weingarten - The Art and Science of Retail Development: A Delicate Balance of Creativity and Discipli ne</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3-4: Guest Speakers – Bob Schultz, RHS Interests, Inc.; Rob Axelson, Isis Investments, L.P. – Real Estate Development: The Real Deal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-Sep</td>
<td>1-2: Mel Hildebrandt &amp; Sheri Roberts: Cost estimating process 7 schedule</td>
<td>JGSB 217</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-3 Professor Cannady and David Gibbs: Financially Feasible Design – Case Studies from a Lifetime of Practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3-4: Professor Duarte and professor Cannady - Selling the Sizzle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-Sep</td>
<td>1-6: Review 1: Initial development concepts and financial feasibility</td>
<td>RSA Jury Rm.</td>
<td>See Review 1 in syllabus</td>
</tr>
<tr>
<td>22-Sep</td>
<td>1-4: Meetings with Mel Hildebrandt &amp; Sheri Roberts, Meeting with professor Duarte and professor Cannady</td>
<td>JGSB 217</td>
<td>Bring the program and the estimate of the total construction cost to this meeting</td>
</tr>
<tr>
<td>29-Sep</td>
<td>1-6: Review 2: Schematic designs and initial market study</td>
<td>RSA Jury Rm.</td>
<td>See Review 2 in syllabus. The program is not supposed to change after this review.</td>
</tr>
<tr>
<td>27-Oct</td>
<td>1-4: Meeting with Mel Hildebrandt &amp; Sheri Roberts. Final cost estimate meetings. Meeting with professor Duarte and professor Cannady</td>
<td>JGSB 217</td>
<td>Plans and specifications should be complete at this time.</td>
</tr>
<tr>
<td></td>
<td>1-6: Review 3: Schematic designs and development proformas</td>
<td>RSA Jury Rm.</td>
<td>See Review 3 in syllabus</td>
</tr>
<tr>
<td>10-Nov</td>
<td>1-4 Meeting with Bob Schultz and Rob Axelson.</td>
<td>JGSB 217</td>
<td>Please send an e-mail to Rob and Bob with your feasibility spreadsheet one week before this meeting.</td>
</tr>
<tr>
<td>17-Nov</td>
<td>1-4 Meeting with Bob Schultz and Rob Axelson.</td>
<td>Rob and Bob Office 2701 Westheimer Suite 13N</td>
<td></td>
</tr>
<tr>
<td>24-Nov</td>
<td>Getting final cost estimate from Linbeck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29-Nov</td>
<td>8:00am Final Development Package due. Send it in pdf format to Morag Everill (<a href="mailto:me3@rice.edu">me3@rice.edu</a>).</td>
<td></td>
<td>See samples of final development packages and Review 4 in syllabus</td>
</tr>
<tr>
<td>1-Dec</td>
<td>8:30am-12:30pm Final Review</td>
<td>RSA Jury Rm.</td>
<td>See Review 4.</td>
</tr>
<tr>
<td></td>
<td>1-2: Course Wrap-Up (Required!)</td>
<td>JGSB 217</td>
<td></td>
</tr>
</tbody>
</table>

Cannady and Duarte Arch 691 – Architectural Problems