SYLLABUS
REAE 5350.532: REAL ESTATE QUANTITATIVE METHODS
SUMMER 2004 – 8-week session starting June 2, 2004
Monday, Wednesday 5:30-8:20 PM
University Center at Dallas

Professor J. Andrew Hansz Ph.D., CFA
Office 619 Business Building
Office Hours By appointment (I will do my best to be available in Dallas for appointments).
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Website http://www.uta.edu/faculty/hansz/ (Downloads available. Please check website frequently for announcements.)

Course Description
In depth study of the statistical, econometric and financial tools used in modern real estate analysis. Emphasis is on the integration of these advanced techniques with the more traditional tools of real estate analysis.

Prerequisites
Prerequisite: FINA 5311 or REAE 5311 or equivalent. See graduate bulletin.

Course Format
- Lectures on statistics and quantitative methods used in real estate research.
- Research Projects/Papers – Two projects using statistics in real estate.
- One quiz and a final exam.
- Attendance and participation is required.

Required/Recommended Textbooks and Software
- *SPSS for Windows FREE 30-Day Trial Version*
- Also, assigned articles and handouts (TBA).

Calculators and Statistical Software
A financial calculator (HP 10-B or equivalent) and a statistical software (SPSS for Windows or equivalent) are required. The calculator must be able to calculate Internal Rate of Return (IRR) and Net Present Value (NPV). This means that the calculator must be able to deal with entry of uneven cash flows. Check the manual before you buy a calculator. You are responsible for learning the keystrokes. Please, do not use any electronic deivces with memory during quizzes or exams.
Grading

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<thead>
<tr>
<th></th>
<th>Percent</th>
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<tbody>
<tr>
<td>Noise Paper</td>
<td>15%</td>
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<tr>
<td>Quiz 1</td>
<td>20</td>
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<tr>
<td>Final Exam</td>
<td>20</td>
</tr>
<tr>
<td>Final Research Paper</td>
<td>45</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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Generally, the grading scale used by the Instructor can be:

- 90 - 100% = A
- 80 - 89% = B
- 70 - 79% = C
- 60 - 69% = D
- Below 60% = F

The instructor can apply a "curve" which could lower these ranges.

Make-up Examination Policy
The instructor reserves the rights to change the style, format, and content of a make-up examination. A make-up exam will be given if the student has a reasonable, verifiable excuse. **However, students should not expect to take more than one make-up exam.** The make-up exam must be completed before the end of the week in which the original exam was scheduled. Once a student has taken an exam, a make-up exam cannot be given.

Policy on Handing in Assignments Late
Several assignments will be made during the quarter. A penalty per class period will be assessed for all assignments turned in late. Absence from class is not a valid excuse for handing in an assignment late.

Policy on Disruptive Classroom Behavior
This course will be conducted in a professional manner. Unprofessional behavior of any form in the classroom will not be tolerated. Students can be withdrawn at the discretion of the instructor for unacceptable behavior. Additionally, a portion of the final grade is attributed to class attitude/contribution. This grade, made at the instructor discretion, is based on attendance and attitude during class.

Withdrawing
It is the student’s responsibility to complete the course or withdraw form the course in accordance with University regulations. Students are strongly encouraged to verify their grade status before dropping a course after the first withdrawal date. A student who drops a course after the first withdrawal date may receive an “F” in the course if the student is failing at the time the course is dropped.
Academic Dishonesty

All students are expected to pursue their scholastic careers with honesty and integrity. It is the philosophy of this Department, this instructor, and the University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

“Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, or any act designed to give unfair advantage to a student or the attempt to commit such acts.” (Regents Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2, Subdivision 3.22)

Institutional procedures regarding charges of academic dishonesty are outlined in Part II, Chapter 2, of the Handbook of Operating Procedures of The University of Texas at Arlington. Copies of the Handbook are available at more than 75 locations on campus, including the Student Congress office, the Library, and the Finance/Real Estate Department office.

Americans with Disabilities Act (ADA)

The University of Texas at Arlington is on record as being committed to both the spirit and letter of the ADA to make reasonable adjustments in the classroom necessary to eliminate discrimination on the basis of disability. Students requesting an accommodation based on disability should meet privately with the instructor during the first week of class to discuss their special needs and advise the instructor of any special needs, abilities or limitations and to discuss the instructor’s expectations in class participation, performance and work standards. Any disclosure by the students of their need for accommodations is recognized to be extremely sensitive and all conversations and other communications will be kept protected and confidential and disclosed on a need-to-know basis only.

Students are responsible for contacting and consulting with the University’s Office for Students with Disabilities prior to contacting the instructor about any disabilities. The student should provide the instructor with some form of written documentation of the disability from an acceptable, external source (such as a doctor, psychiatrist, etc.) and from the Office for Students with Disabilities.

Attendance Policy

Students are expected to attend each class and students are expected to come to each class with their assignments completed. Any student who must miss a class is responsible for securing any and all assignments for coursework missed.

Drop Policy

These policies include by reference all provisions for grade adjustment or drop policies included in the applicable Graduate or Undergraduate Catalog in effect at the start of the semester. It is the student’s responsibility to complete the course or withdraw from the course in accordance with University regulations. No student will be dropped from the class rolls for absences. Students are strongly encouraged to verify their grade status before dropping a course after the first withdrawal date. A student who drops a course after the first withdrawal
date may receive an “F” in the course if the student is failing at the time the course is dropped.

Drop for Non-Payment

It is the policy of the University of Texas at Arlington that students who have not paid by the census date and are dropped for non-payment cannot, under any circumstances, receive a grade for the course. Therefore, a student dropped for non-payment who continues to attend the course will not receive a grade for that course. Emergency loans are available to help students pay tuition and fees. Students can apply for emergency loans by going to the Emergency Tuition Loan Distribution Center at E. H. Hereford University Center (near the southwest entrance).

Distribution of Grades

The distribution of grades for the semester will normally adhere to the guidelines of the Department of Finance and Real Estate. These guidelines are generally based on College of Business Administration averages for similar courses.

Student Evaluation of Teaching

The following appears in Administrative Memorandum No. 98-5, dated August 21, 1997, from the President to academic and administrative offices: “Beginning in Fall 1997, teaching evaluations will be conducted in every class every semester for every instructor of record.”

College of Business Bomb Threat Policy

Effective April 8, 1996, the College of Business Administration adopted a policy to deal with the classroom disruption caused by bomb threats in the building. Section 22.07 of the Texas Criminal law states that a Class A misdemeanor is punishable by (1) a fine not to exceed $4,000, (2) a jail term of not more than one year, or (3) both such a fine and confinement. If anyone is tempted to call in a bomb threat, be aware that UTA has the technology to trace such phone calls.

Every effort will be made to avoid cancellation of presentations/tests caused by bomb threats to the Business Building. Unannounced alternate sites will be available for these classes. If a student who has a class with a scheduled test or presentation arrives and the building has been closed due to a bomb threat, the student should immediately check for the alternate class site notice which will be posted on/near the main doors on the south side of the Business Building. If the bomb threat is received while class is in session, your instructor will ask you to leave the building and reconvene at another location.

Students who provide information leading to the successful prosecution of anyone making a bomb threat will receive one semester’s free parking in the Maverick Garage across from the Business Building. UTA’s Crimestoppers will provide a reward to anyone providing information leading to an arrest. To make an anonymous report, call 817/272-5245.

Food/Drink in Classrooms

College policy prohibits food and/or drinks in classrooms and labs. Anyone bringing food and/or drinks into a classroom or lab will be required to remove such items, as directed by the class instructor or lab instructor.
UTA Student Success Programs

The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. They include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817/272-6107 for more information and appropriate referrals.

Important Dates: University Wide

**Summer 2004 (8-week session)**
- First Day of Classes: June 1
- Late Registrations: June 1 and 2
- Census Date: June 7
- Graduate Student Drop Policy Applies: June 13
- Last Day of Classes: July 28
- Final Exam Dates: July 28 for M-W classes

**Important Course Dates & Deadlines**

- **Saturday Meeting on UTA Campus**: Saturday, June 19\(^{th}\)
  - Introduction to GIS: 9:00 AM to Noon
  - Final Project Data Collection & Literature Search: 1:00 to 4:00 PM

- **Quiz 1**: Monday, June 21\(^{st}\)

- **Noise Paper Deadline**: Wednesday, June 23\(^{rd}\)
  - Late submission penalty of 0% up to 5:30 PM on Monday, July 5\(^{th}\)
  - Late submission penalty of -25% per day after Monday, July 5\(^{th}\)

- **Final Paper Submission Deadline**: Monday, July 26\(^{th}\)
  - Late submission penalty of 0% up to 5:30 PM on Wednesday, July 28\(^{th}\)
  - Late submission penalty of -20% per day after Wednesday, July 28\(^{th}\)

- **Final Paper Presentations**: Wednesday, July 21\(^{st}\) & Monday, July 26\(^{th}\)

- **Final Exam**: July 28, 2004

Please note that the University discourages disseminating grades by telephone or e-mail. If you would like your final grade mailed to you, please bring a self addressed envelop to the final exam.


**Tentative Schedule:** Adjustments will be necessary during the progression of the semester. It is your responsibility to be aware of any class announcements.

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<thead>
<tr>
<th>Week</th>
<th>General Topics</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction and Statistics Review</td>
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<tr>
<td>2</td>
<td>Quantitative Methods</td>
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<tr>
<td>3</td>
<td>Quantitative Methods (continued) &amp; Intro to Geographic Information Systems (GIS)</td>
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<tr>
<td>4</td>
<td>Quantitative Methods</td>
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<tr>
<td>5</td>
<td>Quantitative Methods (continued)</td>
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<tr>
<td>6</td>
<td>Applied Quantitative Techniques (final project oriented)</td>
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<tr>
<td>7</td>
<td>Applied Quantitative Techniques (final project oriented) &amp; Final Project Presentations</td>
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<tr>
<td>8</td>
<td>Final Project Presentations (continued)</td>
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**Text Reading Sequence**

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<thead>
<tr>
<th>Chapter</th>
<th>Topic</th>
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<tbody>
<tr>
<td>3</td>
<td>Statistical Concepts and Market Returns</td>
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<td>4</td>
<td>Probability Concepts</td>
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<td>5</td>
<td>Common Probability Distributions</td>
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<td>6</td>
<td>Sampling and Estimation</td>
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<td>7</td>
<td>Hypothesis Testing</td>
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<td>8</td>
<td>Correlation and Regression</td>
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<tr>
<td>9</td>
<td>Multiple Regression and Issues in Regression Analysis</td>
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