Econ 4357 Managerial Economics

Spring 2018

Section 4357-01: Wednesdays 6:00 p.m – 8:50 p.m. in TWC 130

Instructor: Dr. Vlad Radoias
Office: Smith-Hutson 237A
Office: Smith-Hutson 237A
Location: SHB 237A

Email: radoias@shsu.edu Tue, Thu: 9:30-10:30 a.m. (Huntsville) Phone: (936) 294-3959 or by appointment (only Wed at TWC)

Course Catalog Description: An integration of economic tools of analysis with optimization techniques such as calculus, LaGrangian multipliers and linear programming. Additional topics include risk analysis and decision-making under uncertainty, inventory control, profitability analysis, and capital budgeting. Prerequisites: ECON 2300 or ECON 2302, BANA 2372, BANA 3363.

Learning Objectives: This course is a combination of microeconomic theory, game theory, and their applications to industrial organization, managerial problems, and business strategy. By the end of this course, a successful student will:

- Be able to apply analytical methods and economic principles to study and analyze real world situations and business practices.
- Know how to use calculus based optimization techniques and simple game theoretic concepts that are useful in economics, business, and in many other disciplines and areas.
- Improve analytical, quantitative, and critical thinking skills that you can use beyond this course, and that are in high demand on the job market.

<u>Course Textbook:</u> Samuelson and Marks, **Managerial Economics**, 8th Edition (ISBN: 978-1118808948). Older editions are acceptable. You do not need to purchase a new copy or the online access code.

<u>Lecture Notes:</u> It is essential that you take good notes in class, and don't rely 100% on just reading the textbook. Reading the text can help you, but it is not sufficient. There are two parts that you need to be able to handle in order to be successful: the theoretical concepts and the analytical methodology of approaching and solving problems. You need to follow the lectures and take good notes, particularly when it comes to solving problems.

Requirements and Expectations:

- MATH AND BASIC ECON: You are expected to come in knowing some basic mathematical and economic knowledge. You should be familiar with probability, the concept of a function, plotting graphs, simple algebra, some basic calculus, and basic economic concepts. We will be using all of this, sometimes intensively. Economic theory is math intensive, and the lack of a proper math background is the number one cause of difficulty in this class. I will provide a short refresher at the beginning of the semester, but beyond that it is your responsibility to be well prepared when it comes to mathematical skills and basic economics.
- ELECTRONICS: Basic calculators are allowed during exams and during classes. The use of scientific calculators/cellphones/tablets/etc. during exams is completely prohibited. Please be considerate with the use of mobile devices during lectures I reserve the right to ask you to leave if you are disrupting the class!
- EXAM POLICY: For fairness considerations, there will be **NO MAKEUP** exams, no exceptions. If you miss an exam without a valid excuse you will get a **ZERO** grade. If you have a valid excuse and bring documentation, you will be excused and the grade from your final will be used to account for the missed exam. For all exams, be ON TIME! I will not allow you to enter once the first student to finish exits the room!
- ASSIGNMENTS: There will be multiple online assignments posted on Blackboard during the entire semester. There will also be major written homework assignments due before each exam. Please pay attention during class and check blackboard for posted assignments. Assignments need to be turned in on time, no late assignment will be accepted. If you have plans or anticipate problems when an assignment is due, submit it early. I will not accept any sort of excuses. I will post the assignments well in advance of their due date, and

solutions will be made available immediately after, which makes it unfair for me to accept late submissions, no matter what the reason is.

- ATTENDANCE AND CLASS PARTICIPATION: I will take attendance at the beginning of each lecture. If you are late, I will not count you as present. Class attendance and active participation will improve your understanding of the material and can be used for grading purposes in borderline cases. Furthermore, all the extra credit opportunities (if any) will be presented during lectures. If you miss class on a regular basis, you risk losing these opportunities.
- CHEATING: I am extremely intolerant when it comes to cheating. If I catch you cheating, you will get an automatic F for the course and I will refer you to the dean of students and seek the harshest possible administrative penalties against you. For repeat offenders, I will seek expulsion from the university. Please study and be ethical during exams! Cheating is definitely not worth it from an economic perspective (see the risk-reward tradeoff).

<u>Grading:</u> There will be 2 midterm exams, 3 written homework assignments (problem sets), multiple blackboard assignments, and a comprehensive final exam. They will count towards your final grade as follows:

Exams 75% (3 x 25%)
 Written Assignments 15% (3 x 5%)
 Online Assignments 10%

Note: All exams (including the final) will be a combination of multiple choice/true and false questions plus a few analytical problems. In terms of coverage, each midterm will only test you on partial material, while the final will be comprehensive! For all exams, be there and be ON TIME! There will be NO MAKEUPS! If you miss an exam for a valid excuse, I will allow you to makeup that missed grade during the final. Not waking up, being stuck in traffic, etc. do not constitute valid excuses. We all have different struggles in our lives, but we need to plan ahead and be professional when life demands it. Don't try to get "smart" and miss an exam just because you don't feel it that day. It is in your best interest not to miss any exam!

There will be multiple blackboard assignments consisting of short sets of multiple choice/true and false/fill in the blanks questions similar to what will be on exams. They will be automatically graded by blackboard for accuracy. Under no circumstance I will reopen the assignments for you after the due date. Blackboard will automatically provide you with the correct answers the minute the due date has passed and so it would not be fair for me to allow you access afterwards. However, because stuff happens all the time, at the end of the semester I will drop your lowest score (or one missed) before computing their simple average (each individual assignment will be weighed the same). You will get multiple tries for each assignment and only the best will count. It is important you do these carefully and try to learn from them. I encourage you to work in groups and help each other, but don't just copy the answers from your classmates. Make sure you understand how to get to the answer on your own. Also note that the blackboard questions will be randomized by the computer and so the correct answers might not be the same for all students!

There will also be three major written assignments, due in class on the review day before each exam. If you cannot make it to class that day, either submit it early or scan (or take pictures) and email it to me BEFORE class starts. These will be graded for effort, not for accuracy. I strongly advise you to put proper effort on these as the exam problems will be very similar. Work on them until you are confident you can solve a similar problem in an exam setting.

I cannot stress enough the importance of the homework assignments. Treat them very seriously. This is a very difficult course and these assignments are not only the best practice for the exams, but also provide an opportunity for some "easy" points. There is no reason you cannot be successful in this class if you do the assignments properly (and learn from them).

Final letter grades will be assigned based on the following scale:

```
\begin{array}{lll} A & 90-100\% \\ B & 80-90 \\ C & 70-80 \\ D & 60-70 \\ F & 0-60\% \end{array}
```

Note: these are rigid thresholds! If you don't reach the threshold, you don't get a bump to the higher grade just by rounding up (89.9 is a B, not an A)! Also, in order to preserve fairness, there will be no individual extra

credit. All the extra credit opportunities (if any) will be offered to everyone in class, during the semester, at the discretion of the instructor.

Email Communication: The preferred method of communication is email. I usually respond fairly quickly to non-abusive and considerate emails. Email me if you need to schedule a meeting outside of my office hours, but please do so in advance. Email is also the standard way that I will communicate things to you. Please check your campus mail on a regular basis and make sure your inbox is not full or you might miss important announcements regarding exams/assignments/etc. When you email me, I would appreciate if you wrote your section in the email. I teach multiple classes at SHSU and it will take me some time before I learn your names. Telling me up-front which class (and section) you're taking will help a lot.

Important Dates:

Midterm 1 – Wednesday, February 21st

Midterm 2 – Wednesday, April 4th

(all midterms will be given during regular class time, no make-ups allowed)

FINAL EXAM – Wednesday, May 9th 8:30 p.m. – 10:30 p.m. (double check the schedule on the SHSU webpage)

Tentative Course Outline:

Week 1 – Introduction to Optimal Decision Making and Optimization, Chapter 1&2

Week 2 – Demand Analysis, Chapter 3

Week 3 – Production and Costs, Chapters 5 & 6

Week 4 – Perfect Competition, Chapter 7

Week 5 – Monopoly, Chapter 8

Week 6 - MIDTERM 1

Week 7 – Oligopoly and Intro to Game Theory, Chapter 9

Week 8 – Simultaneous Games, Chapter 10 and Lecture Notes

SPRING BREAK

Week 9 – Sequential Games, Chapter 10 and Lecture Notes

Week 10 – Risk and Uncertainty, Chapter 12

Week 11 – MIDTERM 2

Week 12 – Asymmetric Information, Chapter 14

Week 13 – Asymmetric Information (cont.), Chapter 14 and Lecture Notes

Week 14 – Strategic Pricing, Lecture Notes

Week 15 – Wrap-up and Final Review

May 10th - FINAL EXAM

Notes:

- 1. The listed readings are for reference purposes only. You will actually need to be aware of what is presented in class to be able to connect with the book chapters.
- 2. In addition, I will occasionally post additional handouts on blackboard that hopefully will improve your overall understanding of the issues at hand.
- 3. Not included in the above outline are the due dates for homework assignments. Generally, I will assign these at the end of each major topic/chapter or shortly after. I will always email you when I assign a homework to let you know the specifics and due date/time.
- 4. Depending on the progress we make in class, and your participation, there might be additional topics included such as advanced pricing techniques, bargaining, etc. In my opinion, these are extremely important issues for managerial decision making but time might prevent us from discussing them thoroughly.

And finally...remember that this is an upper level college course! I will treat you as mature adults who genuinely want to learn something. Understand the rules of the game and remember that your thirst for knowledge and seriousness will directly reflect in your performance. Don't expect an easy time, but do not panic if you don't get something at first. Work hard, ask for help, stay engaged and participate in discussions, and there is no reason you cannot be successful. Also feel free to open up your own discussion, whenever you think of an issue that you think is relevant. This is highly encouraged and very valuable to your experience in this course.

Other Disclaimers and University Policies:

Academic Integrity: All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

Absences on Religious Holy Days: Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Section 51.911 (a) (2) defines a religious holy day as: "a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20". A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed. For a complete listing of the university policy, see: http://www.shsu.edu/dept/academic-affairs/documents/aps/students/861001.pdf

Students with Disabilities: It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired. SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see: http://www.shsu.edu/dotAsset/7ff819c3-39f3-491d-b688-db5a330ced92.pdf

Visitors in the Classroom: Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office.

Student Evaluations: Student evaluations of this course play a crucial role in my delivery. This semester, all course evaluations will be administered online during the last two weeks of the course. You will receive an email with a link to the website with directions on how to access the survey. It is vitally important that you complete the survey as I use the results to modify the course and assess my teaching and the University uses the results to address technology and facility needs. You can be assured that your responses will be confidential as the results will be transmitted to me after the grading period and they will not include any identifying information.

Keys and Strategies for Success:

- Understand the course requirements and rules of the game and don't try to find cracks to squeeze through.
- Be serious! Set goals early and often, do your best to achieve them, and (if you fail) figure out why you failed!
- Start fast and avoid procrastination! It is hard to climb out of a hole as the difficulty will increase as we move through the material. You can make your life easy at the end of the semester by working hard at the beginning!
- Work as much as YOU need to! There is no universal number of hours worked that will translate to success. It depends on your goals and personal situation. Be honest with yourself when deciding if you need more work or not! Understand that I cannot grade you based on effort, but only on performance.
- Understand that some learning methods won't work well for this type of class. Mechanic memorization in particular, will only take you so far in this class. Try instead to have a more analytical approach to learning.
- Don't be afraid to ask for help! I'm here to facilitate your learning, but please understand that I'm only half of the equation. Do the work and let me know early if you're struggling.