



**Economics 3125 – 5 Spring 2019**  
**Managerial Economics**  
**TR: 10:00 to 11:15 am**  
**Cameron Hall 101**

**Instructor's Information**

Instructor: Per Norander  
E-mail: [Pnorande@uncc.edu](mailto:Pnorande@uncc.edu)  
Phone: (704) 687-7588  
Office: Friday 218A  
Office Hours: MWF: 10:00 to 11:00 am, Tu and Th: 1:00 to 2:00 pm, and by appointment.

**Teaching Assistant:** TBA, office in Friday Hall

**Required Course Materials and course information:**

- Access to Canvas for course assignments and class communications.
- Managerial Economics, Metzgar, TopHat Publishing. ISBN: 9781773305448  
Top Hat course URL: <https://app.tophat.com/e/662384> Top Hat course Join Code: 662384  
*Note: You save money if you buy access directly from the Top Hat site via the Canvas link.*

**Course Description:** Economic decisions of particular interest to business firms (e.g., demand theory and forecasting, cost analysis, and pricing policies).

**Prerequisites:** ECON 2102; MATH 1120 or MATH 1241; STAT 1220 or equivalent; and INFO 2130; all with grades of C or above.

**Students who found these prerequisite courses challenging, will most likely need to commit considerable extra time and resources to this course, and are strongly encouraged to do so at the onset of class.**

**Course Objectives**

The objective of this course is further develop students existing understanding of microeconomic theory and analytical tools as applies to decision-making processes. The course is centered on the application of economic analyses to the decision making of business managers, providing students with an insight to the many complex challenges facing managers today.

Though definitely quantitatively oriented, the goal of this course is to present students with real-world problems and application for the theories and analytical tools discussed. Rather than trying to present students with extensive lists of rules that apply for each specific situation a manager might face, this course is aimed at teaching students a rational decision-making process that can be generally applied. Substantial consideration will be given to the concepts of risk and uncertainty, and the trade-off between risk and return that all managers face as they try to achieve the goal of maximizing the value of their firms.

### Course Format:

These course objectives will be achieved by a sequence of class lectures, written exams, both web administered and written homework assignments, and class discussions.

| <b>Evaluation Criteria</b>  | <b>Weight</b>  |
|---|----------------|
| The highest 9 end-of chapter question scores<br>( <i>Remembering &amp; Understanding levels of learning</i> )                               | 9% (1% each)   |
| The highest 5 written assignments including excel based exercises<br>( <i>Understanding, Applying, &amp; Analyzing levels of learning</i> ) | 25% (5% each)  |
| 3 highest exam scores<br>( <i>Study guides and practice materials will be provided for each exam</i> )                                      | 66% (22% each) |
| <b>Total:</b>   | <b>100 %</b>   |

The instructor reserves the right to provide opportunities for extra credit on assignments and/or exams at his discretion. Students are encouraged to contact me with any questions or concerns regarding grades. Final letter grades will be assigned based upon the total points and the best judgment of the instructor. . Generally, the following straight scale will be used:

- A: 90% or above**
- B: 80 to 89.9%**
- C: 70 to 79.9%**
- D: 60 to 69.9%**
- F: below 59.9%.**

**End of Chapter Question Sets:** There will be a total of 10 end-of-chapter question sets aimed at insuring that students come to class prepared to engage and apply the course material. Including questions mostly from the *Remembering* and *Understanding* level of learning (according to *Bloom's taxonomy*), these quizzes are designed to help students familiarized themselves with the upcoming topic before in-class lectures and problem solving opportunities. Note that your lowest score on these exercises will be dropped at the end of the semester. **These exercises will be completed via the Top Hat platform (link on Canvas) and only the highest score out of two attempts will count towards your grade.**

**Written Homework Assignments:** Throughout the semester, there will be 6 extensive written assignments where students show their ability to apply the material covered in class. Each written homework assignment will be **posted on Canvas a week prior to its due date** and include problem solving, graphical presentations, and data analysis. Only the top 5 scores will count towards a student's final grade, but these assignments do provide questions very similar to the exams. **Each assignment must be turned in at the beginning of class** unless other arrangements have been made with the instructor prior to the due date.

**Exam Format:** There will be four written exams during the semester. All exams are closed book and will be a combination of multiple choice questions, short answer questions, and longer numerical problems. Quantitative problem-solving questions will dominate the value of exams. Each of the first three exams will exclusively cover the stated chapters, though subsequent material will be based on core concepts covered earlier in the course. **The final exam is comprehensive and will be given on Thursday, May 9<sup>th</sup> at 8:00 to 10:30 am.** The lowest exam will be dropped out of the 3 exams and the final. In other words, **the final can be dropped if a student is satisfied with his or her grade after the first three exams.**

## **Course Policies:**

**Late or missed work:** Note that late or missed assignments or exams will NOT be accepted unless it is the result of: participation in University sanctioned activities and programs; personal illness; and/or other compelling circumstances (written documentation of the reason is required).

**Attendance and participation:** Attendance and active participation is the best way to fully maximize your learning potential, and you are expected to attend all class sessions. Students are expected to read the course materials before each class, and come prepared to discuss the material in class. I will conduct this class in an atmosphere of mutual respect. I encourage your active participation in class discussions. Each of us may have strongly differing opinions on the various topics of class discussions. The conflict of ideas is encouraged and welcome. The orderly questioning of the ideas of others, including mine, is similarly welcome. However, I will exercise my responsibility to manage the discussions so that ideas and argument can proceed in an orderly fashion. Even if you do miss class, you are still responsible for the material covered and are expected to obtain class notes from other students in the class.

**Cells phones and other technology:** The use of cell phones, beepers, or other communication devices is disruptive, and is therefore not permitted during class. If you have a personal or professional emergency or urgent matter, let the instructor know that you may need to respond to a call during class; turn your cell phone to the "vibrate" option, and leave the room to respond to the call. Otherwise, cell phones and other communication devices should be turned off. I also ask that students do not "surf" the internet, text message, or twitter during class; if you have a personal emergency let me know; you can leave the room to respond to a call or text-message. One more thing, **you may not use the calculator features of your cell phone during exams**.

**Academic Integrity:** The UNC Charlotte Code of Student Academic Integrity will be actively enforced in this course. The code forbids cheating, fabricating or falsifying information, submitting academic work for multiple requirements, plagiarizing, abusing academic materials, and complicity in academic dishonesty. Any special requirements or permissions regarding academic integrity will be stated by the instructor and are binding on you. You are expected to report cases of academic dishonesty to the course instructor. Faculty may ask students to produce identification at examinations and may require students to demonstrate that graded assignments completed outside of class are their own work.

**Disability accommodation:** UNC Charlotte is committed to access to education. If you have a disability and need academic accommodations, please provide a letter of accommodation from Disability Services early in the semester. For more information on accommodations, contact the Office of Disability Services at 704-687-0040 or visit their office in Fretwell 230.

**Withdrawals:** Students are expected to complete all courses for which they are registered at the close of the add/drop period. If you are concerned about your ability to succeed in this course, it is important to make an appointment to speak with me as soon as possible. The University policy on withdrawal allows students only a limited number of opportunities available to withdraw from courses. It is important for you to understand the financial and academic consequences that may result from course withdrawal.

**Title IX reporting obligations:** UNC Charlotte is committed to providing an environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic violence, dating violence, and stalking. If you (or someone you know) has experienced or experiences any of these incidents, know that you are not alone. UNC Charlotte has staff members trained to support you in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more. Please be aware that many UNC Charlotte employees, including all faculty members, are required reporters. This means that if you tell me about a situation involving sexual harassment, sexual assault, dating violence, domestic violence, or stalking, I must report the information to the Title IX Coordinator. Although I have to report the situation, you will still have options about how your case will be handled, including whether or not you wish to pursue a formal complaint. Our goal is to make sure you are aware of the range of options available to you and have access to the resources you need.

If you wish to speak to someone confidentially, you can contact any of the following on-campus resources, who are not required to report the incident: (1) University Counseling Center ([counselingcenter.uncc.edu](http://counselingcenter.uncc.edu), 7-0311); (2) Student Health Center ([studenthealth.uncc.edu](http://studenthealth.uncc.edu), 7-7400); or (3) Center for Wellness Promotion ([wellness.uncc.edu](http://wellness.uncc.edu), 7-7407). Additional information about your options is also available at [titleix.uncc.edu](http://titleix.uncc.edu) under the “Students” tab.

**Sexual harassment in web-based or web-assisted courses:** All students are required to abide by the UNC Charlotte [Sexual Harassment Policy](#) and the policy on [Responsible Use of University Computing and Electronic Communication Resources](#). Sexual harassment, as defined in the UNC Charlotte Sexual Harassment Policy, is prohibited, even when carried out through computers or other electronic communications systems, including course-based chat rooms or message boards.

**Revision of the syllabus during the semester:** The standards and requirements set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes will be by announcement in class, by written or email notice, or by changes to this syllabus posted on the course Canvas site.

*The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.*

**Tentative Course Calendar ECON 3125-5**

| <b>Tuesday</b>                   | <b>Topics covered:</b>   | <b>Thursday</b>                  | <b>Topics covered:</b>   |
|----------------------------------|--|----------------------------------|--|
| 1/8                              |  | 1/10                             | Ch 1: Introduction – discussion of the role of a manager                           |
| 1/15                             | Ch 2: Revenue, Cost, and Profit  | <b>1/17</b><br>† <sub>Ch 1</sub> | Ch 2: Marginal analysis and calculus   |
| 1/22<br>† <sub>Ch 2</sub>        | Ch 2: Marginal analysis and Profit maximization  | 1/24                             | Ch 3: Demand Functions and Demand Curves   |
| <b>1/29</b><br>† <sub>Ch 3</sub> | Ch 3: Estimating and Forecasting Demand  | <b>1/31</b><br>* <sub>1</sub>    | Ch 3: Regression Analysis  |
| 2/5                              | Ch 3: Regression Analysis  | 2/7                              | Ch 3: Interpreting Regressions   |
| 2/12<br>* <sub>2</sub>           | <b>Exam 1: Ch 1 – 3</b>  | 2/14                             | Ch 4: Elasticity of demand   |
| <b>2/19</b><br>† <sub>Ch 4</sub> | Ch 4: Elasticity of demand using calculus  | 1/25                             | Ch 4: Revenue maximization and elasticity  |
| <b>2/26</b><br>† <sub>Ch 5</sub> | Ch 4: Constrained and unconstrained optimization<br>Ch 5: Production Process             | <b>2/28</b><br>* <sub>3</sub>    | Ch 5: Production in the short run and the demand for labor                         |
| 3/5                              | <i>Spring Break</i>  | 3/7                              | <i>Spring Break</i>  |
| 3/12                             | Ch 5: Production functions in the short-run  | 3/14                             | Ch 5: Production functions in the long-run.  |
| 3/19<br>† <sub>Ch 6</sub>        | Ch 5: Scales of production and Cobb-Douglas production functions<br>Ch 6: Cost analysis. | <b>3/21</b><br>* <sub>4</sub>    | Ch 6: Economic vs. Accounting costs and profits. Total, average and marginal cost. |
| 3/26                             | Ch 6 Cost analysis – cost functions  | 3/28                             | <b>Exam 2: Ch 4 - 6</b>  |
| 4/2                              | Ch 7: Perfect competition<br>Market vs individual firms                                  | <b>4/4</b><br>† <sub>Ch 7</sub>  | Ch 7: Perfect competition Market efficiency  |
| 4/9                              | Ch 7 and Ch 8: Perfect competition vs. Imperfect competition                             | <b>4/11</b><br>† <sub>Ch 8</sub> | Ch 8: Monopoly – barriers to entry   |
| <b>4/16</b><br>* <sub>5</sub>    | Ch 8: Monopoly – profit maximization.  | <b>4/18</b><br>† <sub>Ch 9</sub> | Ch 8: Monopoly<br>Ch 9: Oligopoly  |
| <b>4/23</b><br>* <sub>6</sub>    | Ch 9: Oligopoly & game theory  | 4/25                             | Ch 9: Oligopoly & game theory  |
| 4/30                             | <b>Exam 3: Ch 7-9</b>  | 5/2                              |  |
| 5/7                              |  | 5/9                              | <b>Comprehensive but optional<br/>Final Exam Section 5</b>                         |

All information is subject to change.

† Indicates dates when an *End-of-Chapter Question Set* is due at the time of class (10:00 am).

\* Indicates dates when a *Written Homework* assignment is due at the beginning of class.

Note that last date to drop classes is Tuesday, March 19<sup>th</sup>

## **A few questions to get us thinking about sound decision-making:**

For past five years, an oil drilling company has profitably operated in the state of South Dakota (assume for now that this is the only place it operates).

a. One oil executive is currently suggesting an expansion for the company, which would raise an additional \$5 million in revenue over the next two years. Another executive is suggesting a reduction in number of oilrigs the company is operating, which would increase profit by \$2 million over the next two years. In your opinion should they expand or contract their operations? Explain your reasoning.

b. Last year, the state legislature instituted a flat annual tax of \$100,000 on any company extracting oil (or natural gas) in South Dakota. Consider (explain) how this tax **affects the amount of oil the company extracts?**

c. Suppose instead that the state legislature imposes a per-unit (well-head) tax of \$10.00 on each barrel of oil extracted. Consider (explain) how this tax **affects the amount of oil the company extracts?**

d. Suppose that the state levies a proportional corporate income tax (say 10%) on the profit earned by the firm. Consider (explain) how this tax **affects the amount of oil the company extracts?**

Now suppose **instead** that the company has a limited number of drilling rigs, which it uses to extract oil at its South Dakota sites but also at other sites across the United States. Furthermore, assume that the drills can be moved if desired.

e. What would be the effect on the company's oil output in South Dakota if the state levied the tax in part d?