



**Economics 3125 – 5 Spring 2020**  
**Managerial Economics**  
**TR: 1:00 to 2:15 pm**  
**McEniry Hall 117**

**Instructor's Information**

Instructor: Per Norander  
E-mail: [Pnorande@uncc.edu](mailto:Pnorande@uncc.edu)  
Phone: (704) 687-7588  
Office: Friday 218A  
Office Hours: Monday through Friday: 10:00 to 11:00 am and by appointment.

**Teaching Assistant:** Renzo Capurro and Johnathon D Nodine, office in Friday Hall 215

**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/866318> Top Hat course Join Code: 866318  
*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, web administered question sets, written homework assignments, and written exams.

<b>Evaluation Criteria</b>	<b>Weight</b>
The 8 highest end-of chapter question scores ( <i>Remembering &amp; Understanding levels of learning</i> )	9% (1.125% each)
The 5 highest written assignments scores ( <i>Understanding, Applying, &amp; Analyzing levels of learning</i> )	25% (5% each)
The 3 highest exam scores ( <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 are assigned based upon the following straight scale:

**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 9 end-of-chapter question sets aimed at ensuring that all students come to class prepared, having already engaged the course material. Using 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 each upcoming topic and to access students' reading comprehension. You will complete these exercises **on the Top Hat platform (link on Canvas)** and you will have two attempts to get each question correct. Note that your lowest assignment score will be dropped at the end of the semester.

**Written Homework Assignments:** There will also be six more extensive written homework assignments aimed at accessing students' ability to apply the course material, including problem solving, graphical presentations, and data analysis. Each written homework assignment will be posted on Canvas at least a week prior to its due date, and only your top five scores will count towards your final grade. Unless other arrangements have been made, **each assignment must be turned in at the beginning of class. Please also note points will be deducted from any assignment that is turned in more than 10 minutes late and only the assignments completed using the provided assignment sheet will be graded.** These assignments include questions very similar to the ones on the exams, so they should also utilized for exam preparations.

**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 quantitative problem-solving questions. Each of the first three exams will exclusively cover since the last exam, though subsequent material will be based on the core concepts covered earlier in the course. **The final exam is comprehensive and will be given on Thursday, May 7<sup>th</sup> at 11:00 am to 1:30 pm.** The lowest score will be dropped out of the 3 exams and the final. In other words, **the final is optional if a student is satisfied with her or his 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:** 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. Consistent class attendance is a strong predictor of academic success. 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. If you earn an F or U grade, your last date of attendance will be reported. This may require you to pay back any financial aid money received for this course.

**Participation:** 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.

**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. Please note, **you may not use the calculator features of your cell phone during exams, and the use of any cell phone during an exam will result in a zero grade on that exam.**

**Academic Integrity:** The UNC Charlotte Code of Student Academic Integrity will be actively enforced in this course. All students are required to read and abide by the Code of Student Academic Integrity. Violations of the Code of Student Academic Integrity, including plagiarism, will result in disciplinary action as provided in the Code. Definitions and examples of plagiarism are set forth in the Code. The Code is available from the Dean of Students Office or online at <https://legal.uncc.edu/policies/up-407>. 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. Students in this course seeking accommodations to disabilities must first consult with the Office of Disability Services and follow the instructions of that office for obtaining 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 allows students only a limited number of opportunities to withdraw from courses, and it is important that you understand the financial and academic consequences of a course withdrawal.

**Diversity:** 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 socioeconomic status.

**Adverse Weather Policies.** The University's Adverse Weather Policy (University Policy 701; <http://legal.uncc.edu/policies/up-701>) states that, without exceptions, the University will operate on a normal schedule unless the Chancellor (or Chancellor's delegate) announces a change in Condition. Faculty are required to follow the procedures outlined in the policy. Notification of a change in the status of University operations will be available through the University website and designated media outlets, in addition to direct notification via email or other electronic communication methods when possible.

**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.

**Tentative Course Calendar ECON 3125-5**

<b>Tuesday</b>	<b>Topics covered:</b>	<b>Thursday</b>	<b>Topics covered:</b>
1/7		1/9	Ch 1: Introduction – discussion of the role of a manager
1/14	Ch 2: Revenue, Cost, and Profit	<b>1/16</b> † <sub>Ch 1</sub>	Ch 2: Marginal analysis and calculus
1/21 † <sub>Ch 2</sub>	Ch 2: Marginal analysis and Profit maximization	1/23	Ch 2: Constrained versus unconstrained optimization
<b>1/28</b> † <sub>Ch 3</sub>	Ch 3: Demand Functions and Demand Curves	<b>1/30</b> * <sub>1</sub>	Ch 3: Estimating and Forecasting Demand
2/4	Ch 3: Regression Analysis	2/6	Ch 3: Regression Analysis s
<b>2/11</b> * <sub>2</sub>	Ch 3: Interpreting Regression	<b>2/13</b>	<b>Exam 1: Ch 1 – 3</b>
2/18	Ch 4: Elasticity of demand	<b>2/20</b> † <sub>Ch 4</sub>	Ch 4: Elasticity of demand using calculus
2/24	Ch 4: Revenue maximization and elasticity	1/27 † <sub>Ch 5</sub>	Ch 4: Income and Cross-Price elasticity. Ch 5: Production Process
3/3	<i>Spring Break</i>	3/5	<i>Spring Break</i>
3/10	Ch 5: Production in the short run and the demand for labor	<b>3/12</b> * <sub>3</sub>	Ch 5: Production functions in the short-run
3/17	Ch 5: Production functions in the long-run – find the optimal amount of L and K	<b>3/19</b> † <sub>Ch 6</sub>	Ch 5: Long-run production and Cobb-Douglas production functions Ch 6: Cost analysis.
<b>3/24</b> * <sub>4</sub>	Ch 6: Computing total, average and marginal cost	3/26	Ch 6 Cost analysis – cost functions
3/31	<b>Exam 2: Ch 4 – 6</b>	4/2	Ch 6: Econ. vs. Acct. costs & profits. Ch 7: Perfect competition
4/7 † <sub>Ch 7</sub>	Ch 7: Competitive markets, normal profit, and efficiency	<b>4/9</b> † <sub>Ch 8</sub>	Ch 7 and Ch 8: Perfect competition vs. Imperfect competition
<b>4/14</b> * <sub>5</sub>	Ch 8: Monopoly – profit maximization.	<b>4/16</b> † <sub>Ch 9</sub>	Ch 9: Oligopoly
<b>4/21</b> * <sub>6</sub>	Ch 9: Oligopoly & game theory	4/23	Ch 9: Oligopoly & game theory
4/28	<b>Exam 3: Ch 7-9</b>	4/30	
5/5		5/7	<b>Comprehensive but optional Final Exam at 11 am Section 005 ONLY</b>

All information is subject to change.

† Indicates dates when an *End-of-Chapter Question Set* is due at **11:00 am**.

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

Note that last date to drop classes is Monday, March 16<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 tax of \$10 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 between states at a relatively low cost 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?