**ARE 401, CRN ― Fall 2018**

**APPLIED DEMAND ANALYSIS**

**Tuesday/Thursday 11:00 AM–12:15 PM, PAS-E 104 (Physical Activities and Sport Building)**

|  |  |  |
| --- | --- | --- |
| **Instructor 1:** Peter Schaeffer Office: 4415 Ag. Sciences Bldg. | **E-Mail:** [Peter.Schaeffer@mail.wvu.edu](mailto:Peter.Schaeffer@mail.wvu.edu) **Phone:** 304-293-5572 | **Office Hours:** By appointment and TTh 9:45 – 10:45 & W 11:00 – 12:45 |
| **Instructor 2:** | **E-Mail:** | **Office Hours:** By appointment andTTH 12:45 – 3:00 |

**REQUIRED TEXT**

* W. Nicholson and C. Snyder: *Intermediate Microeconomics and its Applications*, 12th edition, Thomson/South-Western, 2015 **or**
* W. Nicholson and C. Snyder: *Intermediate Microeconomics and its Applications*, 11th edition, Thomson/South-Western, 2010 **or**
* W. Nicholson and C. Snyder: *Intermediate Microeconomics and its Applications*, 10th edition, Thomson/South-Western, 2007

Information in the syllabus about readings and assignments refers to each edition separately. There are no significant differences between the 11th and the 12th edition, but the 10th edition is missing some newer materials. Thus, while you can use any of these three editions, the 11th or 12th edition is preferred. By providing choices I am hoping to help lower your textbook costs.

**COURSE OBJECTIVES**

The objective of the course is to understand the rationale of economic decision making by individuals and firms and learn how markets operate. Complex economic relationships are synthesized into manageable models. Problems and examples are used to illustrate and apply the theoretical models and concepts. Course participants will learn to use analytical tools to assess and discuss economic issues that underlie the demand for and supply of goods and services.

**PREREQUISITES**

1. Working knowledge of college algebra
2. Principles of microeconomics

**COURSE EXPECTATIONS**

1. Complete assignments on time. Late assignments will not be accepted! The two lowest grades of the completed homework assignments will not be counted towards the final grade. If you miss an assignment, it will be the first grade to be dropped automatically.
2. All homework assignments are drawn from the textbook.
3. Come to class prepared, having read the assigned chapter; please be on time. Be ready to ask and answer questions. Participate.
4. Use the resources provided on the publisher’s webpage (if you have access to it) and by the instructor on eCampus. Make use of office hours.
5. Instructor will help students form small study groups and “register” them. Members of a registered group will not be penalized if some of their answers are identical.
6. Ask for help **as soon as you realize** that you need it; do not wait!
7. If you miss a class session consult the syllabus to check topics covered during your absence and to keep up with assigned readings and assignments. Ask a class mate to share notes and information.
8. Turn off your phone during class or mute the sound. Please also do not use your phone for texting or searching the Internet.
9. Do not use your laptop during class to read, compose, or send emails, work on assignments, or search the Internet.
10. The instructors will keep a record of attendance. Fifteen bonus points will be given for attendance on the last day before a holiday or long weekend. Fifty bonus points are earned for attending at least 87% of all class meetings (26 sessions, including midterms, but excluding the final exam).
11. When communicating with instructors by email, please use the email addresses given on top of this syllabus.

**GRADING**

1. **The Weights:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Exams and Assignments | Maximum Points Possible | | | |
| Two midterm exams (160) and final exam (200) | | | | 520 points |
| Take-home assignments (9 to 10 total)  Bonus points to be added to take-home assignments total score up to  (includes 15 bonus points for submitting SEIs) | | | | 480 points  45 points |
| Bonus points for attending at least 26 of all 30 class sessions (87%), to be added to Total Score for the course | | | 50 points | |
| **Maximum points possible** | | **1,000 points** | | |

Grading criteria for the take-home assignments and exams can be found on eCampus in the *Course Tools* section under *Rubrics*.

1. **Letter Grade:**

Letter grade will be assigned per the following scale:

|  |  |  |  |
| --- | --- | --- | --- |
| 900 and above | | | A |
| 800–899 | B | |
| 700–799 | C | |
| 600–699 | D | |
| Below 600 | F | |

1. **Exams and Assignments:** Exams and take-home assignments consist of textbook questions. Studying the text and the questions at the end of each chapter is an excellent way to prepare for exams. For each chapter, there are solved problems on eCampus that illustrate how principles, theories, and models learned in class are being applied.

* Have a calculator available for exams; you will need it. Use of cell phone for calculations is permitted; no other use of a phone is allowed.
* The exams are “open book.” However, ***looking up answers at the end of the book is not allowed and will be considered cheating***. In addition, notes and the Internet are not to be consulted during exams.
* Missed exams cannot be made up! Exceptions will be granted for exams missed because of participation in WVU-sponsored events. Exceptions must be requested ***prior*** to the exam date.
* ***No late homework assignments will be accepted – no exceptions****!* However, the two assignments with the lowest grade will be dropped. Homework assignments are due in class on the due date.
* ***Please follow the homework guidelines*** (see last page)
* I will offer review sessions for homework assignments before they are due.
* Answers to homework assignments will be posted mid-afternoon of the day when they are due.
* If you miss class to attend a University-sponsored event or because of a personal emergency, please inform the instructor at the earliest time possible (**in writing**), preferably by email. In such a case, the missed homework will be waived. Students who attend a University-sponsored event will be counted as present for calculating overall class attendance. No allowance will be made, however, for excuses – even valid excuses – received after the after the fact.

1. **Changes to Syllabus:** The dates when homework, exams, and specific topics are scheduled in the syllabus are estimates. Based on experience, you can expect minor adjustments over the course of the semester. They will be announced in class and by email.
2. **Academic Honesty:** The rules and guidelines of the University Academic Standards apply to all cases of academic dishonesty.
3. **Social Justice:** “West Virginia University is committed to social justice. I concur with that commitment and expect to foster a nurturing learning environment based upon open communication, mutual respect, and non-discrimination. West Virginia University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color or national origin. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration.

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with Disability Services (304-293-6700).”

Course participants with learning disabilities may qualify for special accommodations, such as extra time on tests. However, a professional with Disability Services must determine if special accommodations are warranted and what they should be.

1. **Recording of Lectures:** If you wish to record one or more lectures, as a courtesy please let me know. If student activities are recorded, you should obtain the permission of the students being recorded.

***Course Outline and Schedule***

**(Dates of scheduled topics are subject to possible changes**)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Dates** | **Topic** | **Chapters by book edition** | | | | |
| **10th** | | **11th** | | **12th** |
| 1. Aug. 16 | Introduction to the Class | 1 | | 1 | | 1 |
| **Basic Building Block I: Demand** | | | | | | |
| 1. Aug. 21 | Individual Demand: Utility and Choice | 1 & 2 | | 1 & 2 | | 1 & 2 |
| 1. Aug. 23 | Individual Demand: Demand Curves | 2 & 3 | | 2 & 3 | | 2 & 3 |
| ***Aug. 23*** | ***Homework 1 Due*** | ***Problems posted on eCampus*** | | | | |
| 1. Aug. 28 | Aggregate Demand: Demand Curves and Elasticity | 4 | | 3 | | 3 |
| 1. Aug. 30 | More on Elasticity  **Attend class and earn 15 bonus points**  **Sept. 3 is Labor Day** | 4 | | 3 | | 3 |
| **Basic Building Block II: Supply and Production** | | | | | | |
| 1. Sept. 4 | Production, Costs, and Supply: Production | 7 | | 6 | | 6 |
| 1. Sept. 6 | Production, Costs, and Supply: Costs | 8 | | 7 | | 7 |
| ***Sept. 6*** | ***Homework 2 Due*** | ***Problems posted on eCampus*** | | | | |
| 1. Sept. 11 | Production, Costs, and Supply: Profit Maximization and Supply | 9 | | 8 | | 8 |
| 1. **Sept. 13** | **EXAM 1** | **1-4 & 7-9** | | **1-3 & 6-8** | | **1-3 & 6-8** |
| **Extension I: Uncertainty and Strategic Behaviors** | | | | | | |
| 1. Sept. 18 | Dealing with Uncertainty | 5 | 4 | | 4 | |
| 1. Sept. 20 | Uncertainty and Strategy: Game Theory | 6 | 5 | | 5 | |
| ***Sept. 20*** | ***Homework 3 Due*** | ***Problems posted on eCampus*** | | | | |
| 1. Sept. 25 | Uncertainty and Strategy: Game Theory | 6 | 5 | | 5 | |
| **Basic Building Block III: Competitive Markets** | | | | | | |
| 1. Sept. 27 | Perfectly Competitive Markets: Single Market | 10 | | 9 | | 9 |
| ***Sept. 27*** | ***Homework 4 Due*** | ***Problems posted on eCampus*** | | | | |
| 1. Oct. 2 | Perfectly Competitive Markets: General Equilibrium and Welfare | 11&12 | | 10 | | 10 |
| 1. Oct. 4 | Perfectly Competitive Markets: General Equilibrium and Welfare | 11&12 | | 10 | | 10 |
| ***Oct. 2*** | *Homework 5 Due* | ***Problems posted on eCampus*** | | | | |
| **Extension II: Market Power** | | | | | | |
| 1. Oct. 9 | Market Power: Monopoly (Output Markets) | 13 | | 11 | | 11 |
| 1. Oct. 11 | Market Power: Monopoly (Output Markets) | 13 | | 11 | | 11 |
| ***Oct. 11*** | *Homework 6 Due* | ***Problems posted on eCampus*** | | | | |
| 1. **Oct. 16** | EXAM 2 | **5,6 & 10-13** | | **4,5 & 9-11** | | **4,5 & 9-11** |
| 1. Oct. 18 | Market Power: Imperfect Competition | 14 | | 12 | | 12 |
| ***Oct. 18*** | *Homework 7 Due* | ***Problems posted on eCampus*** | | | | |
| 1. Oct. 23 | Market Power: Imperfect Competition | 14 | | 12 | | 12 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Basic Building Block IV: Input Markets (special case of supply)** | | | | |
| 1. Oct. 25 | Input Markets: Pricing in Input Markets | 15 | 13 | 13 |
| ***Oct. 25*** | ***Homework 8 Due*** | ***Problems posted on eCampus*** | | |
| 1. Oct. 30 | Input Markets: Capital and Time | 16 | 14 | 14 |
| 1. Nov. 1 | Input Markets: Capital and Time  **Daylight Savings Time ends on Nov. 4** | 16 | 14 | 14 |
| **Nov. 6** | **Election Day – No Classes** |  |  |  |
| 1. Nov. 1 | Input Markets: Capital and Time | 16 | 14 | 14 |
| **Advanced Topics: (Causes of) Market Imperfections and Special Goods** | | | | |
| 1. Nov. 9 | Market Imperfections: Asymmetric Information | 17 | 15 | 15 |
| ***Nov. 9*** | ***Homework 9 Due*** | ***Problems posted on eCampus*** | | |
| 1. Nov. 13 | Asymmetric Information / Environmental and Natural Resources | 17/18 | 15/16 | 15/16 |
| 1. Nov. 15 | Environmental and Natural Resources / Common Pool Goods  **Attend class and earn 15 bonus points** | 17/18 | 15/16 | 15/16 |
| **Nov. 18 - 26** | **Fall Recess / Thanksgiving Break** | **Eat Turkey** | | |
| 1. Nov. 27 | Public Goods and Common Pool Goods | 18 | 16 | 16 |
| 1. Nov. 29 | Public Goods and Common Pool Goods / Departures from Rationality: Behavioral Economics  **Submit evidence of completion of SEIs before the last day of classes and earn 15 bonus points** | 18 | 16 | 16 |
| ***Nov. 29*** | ***Homework 10 Due*** | ***Problems posted on eCampus*** | | |
| 1. Dec. 4 | Departures from Rationality: Behavioral Economics  **Last day of classes** | Not applicable | 17 | 17 |
| **Dec.** | **FINAL EXAM: 8:00 AM - 10:00 AM** | **12-18** | **11-16** | **11-16** |
| **Dec. 15** | **COMMENCEMENT: CONGRATULATIONS IF YOU ARE GRADUATING!** | | | |

Homework Instructions

##### Name and Date

Name and date should be on top of the first page. Please print!

##### Title

ARE 401, Assignment # [Example: ARE 401, Homework 2]

##### General Format

* Write legibly and neatly. Check spelling and grammar. If you type your assignments, please use 11 or 12 pt. fonts (Arial, Times New Roman, or Calibri are preferred fonts) and 1.5 spaces between lines. Take advantage of the spell checker. Learn to use Word’s built in equation editor.
* Leave margins – roughly one inch on top, bottom, and on both sides – for grader’s comments.
* Write **only on one** side and use standard letter size paper.
* Staple multiple pages. Loose papers will not be accepted! Paper clips are not a substitute for staples.

##### Illustrations and Calculations

* Graphs should be drawn carefully and accurately; use a ruler. Alternatively, learn how to use free online software, e.g., <https://www.lucidchart.com/> or download free software, such as Dia (<http://dia-installer.de/index.html.en>). Axes of graphs and curves that are part of the graph must be labelled. PowerPoint also has (more limited) graphing capabilities.
* You can use Excel for calculations and graphs of functions. Note that familiarity with spreadsheets is a good professional skill. When applicable, solved problems on eCampus contain information on how to program Excel to help solve problems.
* Microsoft offers free math software. Math Solver (<https://www.microsoft.com/en-us/store/p/math-solver/9wzdncrfj47x>) requires Windows 10. It is very easy to use – and free – and can solve, for example, quadratic equations. If you use other sources of free software, be careful to avoid contracting a computer virus.

##### Solutions

* Show the work that led you to your solution.
* Unless it is obvious, explain what the answer means. Answers without explanation will not receive credit.
* Highlight the final answer or conclusion, for example, by underlining it.

##### Electronic Submission of Assignments

* Only typed electronic submissions will be accepted.
* Photographed or scanned assignments will not be accepted.
* The homework must be in a single file. Submission of separated files for graphs is not acceptable.
* File names should have the format *ARE401\_ HW#\_LastnameInitial* [Example: ARE401\_HW2\_SchaefferP].
* Word files are preferred, but PDF files will also be accepted. No other file format will be accepted.

##### Academic Integrity

* Do not copy from someone else and do not allow others to copy from you. If two or more students hand in assignments that are virtually identical, the instructor may charge these students with cheating and not count the assignment. The “cheating rule” does not apply to students who are members of a registered study group.