TEACHING STATEMENT AND PORTFOLIO

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1 Teaching Statement

"*A teacher is someone who could propagate the doctrine, impart professional knowledge, and resolve doubts.*" So wrote Yu Han, a great Chinese Philosopher, in his work, *On Teaching*. A good educator should design a relevant course to each group of students, should motivate students to conduct their own understandings and thinking processes, and should be warm, accessible, enthusiastic, and caring. I have had the opportunities to teach both Principles and Intermediate levels of Economics as the primary instructor at Kansas State University since the fall of 2017.

What should I, as a college teacher, do in teaching Economics? There are three points of my thoughts.

A class that is of interest and useful to students needs to be designed according to their profile. I believe every group of students is unique. Students of business major taking economics class often are intrigued by the application of economics principles, while those of economics major need to be equipped with more theoretical fundamentals, and students from other general majors are more interested by the knowledge to connect with their fields. To maximize the "utility function" of a class, I intend to make the course relevant to the majors and career goals of different groups of students. To create an engaging, individualized environment, I ask my students to complete short personal information surveys on the first day of class to learn about their majors and minors, if they are taking my economics class as a requirement or elective, any relevant previous coursework, as well as their interests, aspirations, and backgrounds. Therefore, I can adjust the examples and case studies accordingly, so that everyone can be engaged and comfortable to connect what they learned to real life.

"*Students in the 21st century should think like economists,*" said Dr. Gregory Mankiw. Students should not learn from an economics class for only equations, terminologies, and theories in books; instead, my job is to equip them with tools to conduct self-directed learning and to inspire them to view the world through the lens of an economist. In class, I teach students to read literature and understand the principles from different angles. I like to use case studies and guide students to transform theoretical knowledge to decision making. After class, students are encouraged and rewarded to attend economist talks, and I challenge them to detect and explain the application of economics in movies and news. Overall, I hope students to obtain the skills that fit them the best to solve problems in reality.

Learning from teaching experts and peers as well as analyzing feedback from students,

are effective routes to improve my teaching style. I sit in the classes of senior instructors and observe how do effective teachers do. I took the Effective Teaching Practices course to enhance my teaching skills further. I conduct mid- and end-of-semester feedback from students and peers to identify the pace of lecturing, the productivity of class, and the effectiveness of assignments. After each exam, I identify students whose performances were below the class average and send emails inquiring about their performance and provide personal meeting opportunities to assist. Learning from peers and students keeps my brain young, allows me to continue my own journey as a student and a lifelong learner.

The art of teaching happens from the head and the heart. It's a journey that revolves around your ability to connect, inspire, and enable both your learners and your colleagues. It's also a journey that fulfills pride, challenges, and happiness. I can't find the words to express how proud I'm when I meet a student after their classroom days and discover that student has always remembered how well and with how much compassion they were taught. Ineluctably, there are comments, as impartial as: *"she makes me confused about ..."* brings me challenge and inspirations to change. At the same time, the sweet praises, as simple as, *"she cares"* encourage me to devote myself more into my beloved teaching career.

2 Teaching Experience

2.1 Detailed Teaching History

- ECON 520: Intermediate Microeconomics, Fall 2017
- ECON 120: Principles of Microeconomics (First-Year Seminar section), Spring 2018, Fall 2018
- ECON 510: Intermediate Macroeconomics, Spring 2019
- ECON 110: Principles of Macroeconomics, Fall 2019, Spring 2020, Fall 2020 (on going)

2.2 Professional Development

To enhance my teaching skills and provide better teaching service to K-State students, I have participated in effective teaching and professional development programs. These experiences have introduced me to best practices that I have, and will continue to incorporate in my teaching career.

- **Certificate in Effective College Instruction**

  American Council on Education and the Association of College and University Educators, 2019

- **Graduate Teaching Assistant Recognition of Achievement in Professional Development**

  Teaching & Learning Center, Kansas State University, 2018

3 Evidence of Teaching Effectiveness

3.1 Teaching Evaluations

Table 1 summaries overall ratings of teaching evaluations for the course I've taught at K-State. Student ratings of instructions are out of 5 possible points. The points ranging from "5 =Very High" to "1 = Very Low". After class size and student characteristics are taken into account, the ratings might be adjusted to reflect the overall effectiveness as a teacher. The course numbers are defined as follows:

- ECON 110: Principles of Macroeconomics
- ECON 120 (FYS): Principles of Microeconomics (First-Year Seminar)
- ECON 510: Intermediate Macroeconomics
- ECON 520: Intermediate Microeconomics

Table 1. Teaching Evaluation Summary Statistics

	Fall 2017	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020
Course	ECON 520	ECON 120	ECON 120	ECON 510	ECON 110	ECON 110
Form	TEVAL	IDEA	IDEA	TEVAL	TEVAL	TEVAL
Overall rating*	3.4	3.0	3.5	4.5	3.7	3.9

*Please find the other measurements in the attachments

Teval Report: Student Ratings of Instruction

Teaching and Learning Center | Kansas State University

Faculty Member: **Liao, Jingwen**		Course #: **ECON 520**
Hr./Days: **930 MWF On Campus**	College: **Arts and Sciences**	Term: **Fall 2017**

Responses from 16 of the 31 enrolled (52%) Offered: In Class

Overall Effectiveness

	Number Responding [VL=1, VH=5]						Statistics	
	VL	L	M	H	VH	OMIT	SD[1]	AVG
Obtained Responses								
1. Overall effectiveness as a teacher	1	2	6	5	2	0	1.0	3.3
11. Increased desire to learn about the subject	1	6	3	5	1	0	1.1	2.9
14. Amount learned in the course	0	4	6	5	1	0	0.9	3.2

	Statistics		Comparative Status[2]	
	Raw	Adjusted[3]	Raw	Adjusted[3]
Averages and Comparative Status				
1. Overall effectiveness as a teacher	3.3	3.4	LM	LM
11. Increased desire to learn about the subject	2.9	3.1	L	LM
14. Amount learned in the course	3.2	3.1	L	L

Ratings of Student Attributes and Instructional Styles

	Number Responding [VL=1, VH=5]						Statistics	
	VL	L	M	H	VH	OMIT	SD[1]	AVG
Relevant Student Attributes								
12. Interest in the course before enrolling	2	1	7	5	1	0	1.1	3.1
13. Effort to learn in the course	0	1	5	8	2	0	0.8	3.7
Instructional Styles								
A. Establishing a Learning Climate								
2. Made the course goals and objectives clear	0	0	5	10	1	0	0.6	3.8
3. Well prepared for class	0	3	0	8	5	0	1.0	3.9
5. Interest in helping students learn	1	0	3	9	3	0	0.9	3.8
10. Willingness to help outside of class	0	0	2	9	5	0	0.6	4.2
B. Facilitating Student Learning								
4. Explained the subject clearly	2	2	7	4	1	0	1.1	3.0
6. Stimulated thinking about the subject	1	4	6	4	1	0	1.0	3.0
7. Made helpful comments on student work	0	5	6	3	2	0	1.0	3.1
8. Grading procedures fair and equitable	0	0	3	8	5	0	0.7	4.1
9. Realized when students did not understand	1	4	4	5	2	0	1.1	3.2

Instructor's Description of Class

A. Type of class	Lecture
B. Class size	About right
C. Physical facilities	Exceptionally good
D. Previously taught this course?	None
E. Approach significantly different this term?	
F. Description of teaching load?	Average
G. Attitude toward teaching this course	I was really enthusiastic
H. Control of course decisions	Yes- I was responsible for all decisions
I. Differences in student preparation	A minor problem
J. Student enthusiasm	Mixed; both high and low
K. Student effort to learn	Satisfactory
L. Additional comments?	No additional comments

[1] STANDARD DEVIATION

[2] RELATIVE TO KSU CLASSES RATED BY 10 OR MORE STUDENTS: H=UPPER 10%; HM=NEXT 20%; M=MIDDLE 40%; LM=NEXT 20%; L=LOWEST 10%

[3] ADJUSTED FOR STUDENT CHARACTERISTICS & CLASS SIZE: SEE TEVAL GUIDE

LIAO, J L

Kansas State University

Economics 000120
TU 09:30
Spring 2018
Local code: 307

IDEA Diagnostic Form Report

To learn more, see the Interpretive Guide: www.theideacenter.org/diagnosticguide.pdf

Of the 13 students enrolled, 13 responded (100%). Feedback from individual classes is always useful to guide improvement efforts. Typically, multiple classes should be used for evaluation, using more classes when they are small (fewer than 10) or when they have low response rates (less than 60%) (see www.theideacenter.org/AdminDecisions).

Summary Evaluation of Teaching Effectiveness

Teaching effectiveness is assessed in two ways: **A. Progress on Relevant Objectives**, a weighted average of student ratings of the progress they reported on objectives selected as "Important" or "Essential" (double weighted) and **B. Overall Ratings**, the average student agreement with statements that the teacher and the course were excellent. The **SUMMARY EVALUATION** is the average of these two measures. Individual institutions may prefer to combine these measures in some other manner to arrive at a summary judgment.

Converted Averages are standardized scores that take into account the fact that the average ratings for items on the IDEA form are not equal; students report more progress on some objectives than on others. Converted scores all have the same average (50) and the same variability (a standard deviation of 10); about 40% of them will be between 45 and 55. Because measures are not perfectly reliable, it is best to regard the "true score" as lying within plus or minus 3 of the reported score.

For comparative purposes, use converted averages. Your converted averages are compared with those from all classes in the IDEA database. If enough classes are available, comparisons are also made with classes in the same broad *discipline* as this class and/or with all classes that used IDEA at your *institution*. The *Interpretive Guide* offers some suggestions for using comparative results; **some institutions may prefer to establish their own "standards" based on raw or adjusted scores rather than on comparative standing.**

Both unadjusted (raw) and adjusted averages are reported. The latter makes classes more comparable by considering factors that influence student ratings, yet are beyond the instructor's control. Scores are adjusted to take into account student desire to take the course regardless of who taught it (item 39), student work habits (item 43), instructor reported class size, and two multiple item measures (student effort not attributable to the instructor and course difficulty not attributable to the instructor).

Your Average Scores

	Your Average (5-point scale)	
	Raw	Adj.
A. Progress on Relevant Objectives [1] **Nine** objectives were selected as relevant (Important or Essential –see page 2)	3.1	3.2
Overall Ratings		
B. Excellent Teacher	2.4	2.7
C. Excellent Course	2.5	2.6
D. Average of B & C	2.5	2.7
Summary Evaluation (Average of A & D) [1]	**2.8**	**3.0**

[1] If you are comparing Progress on Relevant Objectives from one instructor to another, use the converted average.

[2] The process for computing Progress on Relevant Objectives for the Discipline and Institution was modified on May 1, 2006. Do not compare these results with reports generated prior to this date.

Your Converted Average When Compared to All Classes in the IDEA Database

Comparison Category	A. Progress on Relevant Objectives		Overall Ratings						Summary Evaluation (Average of A & D)	
			B. Excellent Teacher		C. Excellent Course		D. Average of B & C			
	Raw	Adj.	Raw	Adj.	Raw	Adj.	Raw	Adj.	Raw	Adj.
Much Higher Highest 10% (63 or higher)										
Higher Next 20% (56–62)										
Similar Middle 40% (45–55)										
Lower Next 20% (38–44)		38								
Much Lower Lowest 10% (37 or lower)	35		22	27	26	29	24	28	30	33

Your Converted Average When Compared to Your: [2]

Discipline (IDEA Data)	31	35	21	26	24	28	23	27	27	31
Institution	30	37	18	25	23	32	21	29	26	33

IDEA Discipline used for comparison:
Economics

Student Ratings of Learning on Relevant (Important and Essential) Objectives

Average unadjusted (raw) and adjusted progress ratings are shown below for those objectives you identified as "Important" or "Essential." **Progress on Relevant Objectives** (also shown on page 1) is a weighted average of student ratings of the progress they reported on objectives selected as "Important" or "Essential" (double weighted). The percent of students rating each as "1" or "2" (either "no" or "slight" progress) and as "4" or "5" ("substantial" or "exceptional" progress) is also reported. These results should help you identify objectives where improvement efforts might best be focused. Page 3 contains suggestions about the types of changes you might consider to obtain more satisfactory results. Also, refer to the **POD–IDEA Center *Learning* Notes** (www.theideacenter.org/podidea/PODNotesLearning.html).

	Importance Rating	Your Average (5–point scale)		Percent of Students Rating		Your Converted Average When Compared to Group Averages					
						IDEA Database		IDEA Discipline[1]		Your Institution[1]	
		Raw	Adj.	1 or 2	4 or 5	Raw	Adjusted	Raw	Adjusted	Raw	Adjusted
21. Gaining factual knowledge (terminology, classifications, methods, trends)	**Essential**	**3.5**	**3.7**	**8%**	**46%**	**41 Lower**	**43 Lower**	**35 Much Lower**	**40 Lower**	**35 Much Lower**	**41 Lower**
22. Learning fundamental principles, generalizations, or theories	**Essential**	**3.5**	**3.6**	**15%**	**38%**	**40 Lower**	**43 Lower**	**33 Much Lower**	**39 Lower**	**34 Much Lower**	**41 Lower**
23. Learning to *apply* course material (to improve thinking, problem solving, and decisions)	Important	2.8	2.9	38%	23%	26 Much Lower	29 Much Lower	22 Much Lower	25 Much Lower	20 Much Lower	28 Much Lower
24. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course	Important	2.8	3.0	31%	23%	27 Much Lower	30 Much Lower	27 Much Lower	31 Much Lower	23 Much Lower	30 Much Lower
25. Acquiring skills in working with others as a member of a team	Important	2.8	3.1	38%	31%	32 Much Lower	37 Much Lower	33 Much Lower	38 Lower	26 Much Lower	36 Much Lower
26. Developing creative capacities (writing, inventing, designing, performing in art, music, drama, etc.)	Minor/None										
27. Gaining a broader understanding and appreciation of intellectual/cultural activity (music, science, literature, etc.)	Minor/None										
28. Developing skill in expressing myself orally or in writing	Important	2.2	2.3	54%	15%	26 Much Lower	28 Much Lower	25 Much Lower	25 Much Lower	23 Much Lower	30 Much Lower
29. Learning how to find and use resources for answering questions or solving problems	Important	2.8	3.0	46%	23%	33 Much Lower	37 Much Lower	29 Much Lower	32 Much Lower	26 Much Lower	35 Much Lower
30. Developing a clearer understanding of, and commitment to, personal values	Minor/None										
31. Learning to *analyze* and *critically evaluate* ideas, arguments, and points of view	Important	3.2	3.4	23%	31%	38 Lower	42 Lower	35 Much Lower	40 Lower	37 Much Lower	44 Lower
32. Acquiring an interest in learning more by asking my own questions and seeking answers	Important	3.0	3.2	38%	31%	36 Much Lower	39 Lower	34 Much Lower	38 Lower	34 Much Lower	41 Lower
Progress on Relevant Objectives		**3.1**	**3.2**			**35**	**38**	**31**	**35**	**30**	**37**

[1] The process for computing Progress on Relevant Objectives for the Discipline and Institution was modified on May 1, 2006. Do not compare these results with reports generated prior to this date.

Much Higher = Highest 10% of classes (63 or higher)
Higher = Next 20% (56–62)
Similar = Middle 40% (45–55)
Lower = Next 20% (38–44)
Much Lower = Lowest 10% (37 or lower)

Description of Course and Students

Students described the course by rating three items related to "level of academic challenge." Results cannot be interpreted as "good" or "bad"; in general, these ratings have a slight positive relationship with measures of academic achievement. The three items describing your students relate to their academic motivation and work habits and are key factors in developing adjusted ratings.

Course Description	Your Average (5–point scale)	Your Converted Average When Compared to Group Averages					
		IDEA Database		IDEA Discipline		Your Institution	
33. Amount of reading	2.2	37	Much Lower	28	Much Lower	40	Lower
34. Amount of work in other (non–reading) assignments	2.5	34	Much Lower	31	Much Lower	37	Much Lower
35. Difficulty of subject matter	3.5	51	Similar	43	Lower	54	Similar
Student Description							
37. I worked harder on this course than on most courses I have taken.	3.5	49	Similar	47	Similar	50	Similar
39. I really wanted to take this course regardless of who taught it.	2.5	34	Much Lower	31	Much Lower	30	Much Lower
43. As a rule, I put forth more effort than other students on academic work.	3.8	54	Similar	47	Similar	47	Similar

Much Higher = Highest 10% of classes (63 or higher)
Higher = Next 20% (56–62)
Similar = Middle 40% (45–55)
Lower = Next 20% (38–44)
Much Lower = Lowest 10% (37 or lower)

Improving Teaching Effectiveness

One way to improve teaching effectiveness is to make more use of the teaching methods closely related to learning on specific objectives.

- Review page 2 to identify the objective(s) where improvements are most desirable.
- Use the first column to answer the question, "Which of the 20 teaching methods are most related to learning on these objective(s)?"
- Review the next two columns to answer the question, "How did students rate my use of these important methods?"
- Read the last column to answer the question, "What changes should I consider in my teaching methods?"
- Beyond specific methods, do the results suggest a general area (e.g., Stimulating Student Interest) where improvement efforts should be focused?

Suggested Actions are based on comparisons with ratings for classes of similar size and level of student motivation. **Consider increasing use** means you employed the method less frequently than those teaching similar classes. **Retain current use or consider increasing** means you employed the method with typical frequency. **Strength to retain** means you employed the method more frequently than those teaching similar classes. More detailed suggestions are in the **Interpretive Guide** (**www.theideacenter.org/diagnosticguide.pdf**), **POD–IDEA Center Notes** (**www.theideacenter.org/podidea**), and **POD–IDEA Center *Learning* Notes** (**www.theideacenter.org/podidea/PODNotesLearning.html**).

Teaching Methods and Styles

	Relevant to Objectives: (see page 2)	Your Average (5–point scale)	Percent of Students Rating 4 or 5	Suggested Action
Stimulating Student Interest				
15. Inspired students to set and achieve goals which really challenged them	**All selected objectives**	**2.7**	**23%**	**Consider increasing use**
8. Stimulated students to intellectual effort beyond that required by most courses	**21, 22, 23, 24, 28, 29, 31, 32**	**3.1**	**38%**	**Consider increasing use**
13. Introduced stimulating ideas about the subject	**21, 22, 23, 24, 28, 29, 31, 32**	**2.9**	**31%**	**Consider increasing use**
4. Demonstrated the importance and significance of the subject matter	21, 22, 23, 24, 32	3.9	69%	Retain current use or consider increasing
Fostering Student Collaboration				
18. Asked students to help each other understand ideas or concepts	**25, 28, 29, 31, 32**	**3.1**	**38%**	**Consider increasing use**
16. Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own	**28, 31**	**2.7**	**23%**	**Consider increasing use**
5. Formed "teams" or "discussion groups" to facilitate learning	**25**	**3.2**	**31%**	**Consider increasing use**
Establishing Rapport				
2. Found ways to help students answer their own questions	**All selected objectives**	**3.2**	**31%**	**Consider increasing use**
7. Explained the reasons for criticisms of students' academic performance	**24, 25, 28, 29, 31, 32**	**2.5**	**15%**	**Consider increasing use**
1. Displayed a personal interest in students and their learning	**23, 24, 32**	**3.9**	**69%**	**Consider increasing use**
20. Encouraged student–faculty interaction outside of class (office visits, phone calls, e–mails, etc.)	Not relevant to objectives selected	3.5	46%	
Encouraging Student Involvement				
19. Gave projects, tests, or assignments that required original or creative thinking	**28, 29, 31**	**2.5**	**15%**	**Consider increasing use**
14. Involved students in "hands on" projects such as research, case studies, or "real life" activities	**25, 29**	**2.6**	**23%**	**Consider increasing use**
9. Encouraged students to use multiple resources (e.g. data banks, library holdings, outside experts) to improve understanding	**29**	**2.5**	**15%**	**Consider increasing use**
11. Related course material to real life situations	23	3.8	69%	Retain current use or consider increasing
Structuring Classroom Experiences				
6. Made it clear how each topic fit into the course	**21, 22, 23, 24, 25, 32**	**3.3**	**54%**	**Consider increasing use**
10. Explained course material clearly and concisely	**21, 22, 23, 24, 32**	**2.8**	**15%**	**Consider increasing use**
3. Scheduled course work (class activities, tests, projects) in ways which encouraged students to stay up–to–date in their work	**21, 23**	**3.6**	**62%**	**Consider increasing use**
12. Gave tests, projects, etc. that covered the most important points of the course	21, 22	4.0	85%	Retain current use or consider increasing
17. Provided timely and frequent feedback on tests, reports, projects, etc. to help students improve	Not relevant to objectives selected	3.1	23%	

5–point Scale: 1 = Hardly Ever 2 = Occasionally 3 = Sometimes 4 = Frequently 5 = Almost Always

Statistical Detail

	Number Responding							
	1	2	3	4	5	Omit	Avg.	s.d.
1. Displayed a personal interest in students and their learning	0	0	4	6	3	0	3.9	0.8
2. Found ways to help students answer their own questions	0	3	6	2	2	0	3.2	1.0
3. Scheduled course work (class activities, tests, projects) in ways...	0	2	3	6	2	0	3.6	1.0
4. Demonstrated the importance and significance of the subject matter	0	1	3	5	4	0	3.9	1.0
5. Formed "teams" or "discussion groups" to facilitate learning	1	3	5	1	3	0	3.2	1.3
6. Made it clear how each topic fit into the course	1	3	2	5	2	0	3.3	1.3
7. Explained the reasons for criticisms of students' academic...	3	4	4	1	1	0	2.5	1.2
8. Stimulated students to intellectual effort beyond that required by...	2	1	5	4	1	0	3.1	1.2
9. Encouraged students to use multiple resources (e.g. data banks,...	3	4	4	1	1	0	2.5	1.2
10. Explained course material clearly and concisely	2	2	7	1	1	0	2.8	1.1
11. Related course material to real life situations	1	1	2	5	4	0	3.8	1.2
12. Gave tests, projects, etc. that covered the most important points...	0	0	2	9	2	0	4.0	0.6
13. Introduced stimulating ideas about the subject	2	2	5	3	1	0	2.9	1.2
14. Involved students in "hands on" projects such as research, case...	3	4	3	1	2	0	2.6	1.4
15. Inspired students to set and achieve goals which really...	4	0	6	2	1	0	2.7	1.3
16. Asked students to share ideas and experiences with others...	4	1	5	1	2	0	2.7	1.4
17. Provided timely and frequent feedback on tests, reports,...	0	4	6	1	2	0	3.1	1.0
18. Asked students to help each other understand ideas or concepts	2	1	5	4	1	0	3.1	1.2
19. Gave projects, tests, or assignments that required original or...	2	5	4	2	0	0	2.5	1.0
20. Encouraged student–faculty interaction outside of class (office...	1	1	5	2	4	0	3.5	1.3

Key: 1 = Hardly Ever 2 = Occasionally 3 = Sometimes 4 = Frequently 5 = Almost Always

The details on this page are of interest primarily to those who want to confirm scores reported on pages 1–3 or who want to determine if responses to some items were distributed in an unusual manner.

Converted Averages are reported only for relevant learning objectives (Important or Essential –see page 2) and other items for which comparisons were provided.

Notes:
Consider selecting fewer objectives as "Important or "Essential."
Discipline code selected on FIF: 4506
Discipline code used for comparison: 4506

									Converted Avg.		Comparison Group Average		
									Raw	Adj.	IDEA	Discipline	Institution
21. Gaining factual knowledge (terminology,...	**0**	**1**	**6**	**4**	**2**	**0**	**3.5**	**0.9**	**41**	**43**	**4.0**	**4.2**	**4.2**
22. Learning fundamental principles, generalizations, or...	**0**	**2**	**6**	**2**	**3**	**0**	**3.5**	**1.1**	**40**	**43**	**3.9**	**4.2**	**4.2**
23. Learning to *apply* course material (to improve thinking,...	**2**	**3**	**5**	**2**	**1**	**0**	**2.8**	**1.2**	**26**	**29**	**4.0**	**4.1**	**4.2**
24. Developing specific skills, competencies, and points of...	**2**	**2**	**6**	**2**	**1**	**0**	**2.8**	**1.1**	**27**	**30**	**4.0**	**4.0**	**4.2**
25. Acquiring skills in working with others as a member of...	**3**	**2**	**4**	**3**	**1**	**0**	**2.8**	**1.3**	**32**	**37**	**3.9**	**3.8**	**4.1**
26. Developing creative capacities (writing, inventing, designing,...	6	0	5	2	0	0	2.2	1.2	NA	NA	3.9	3.5	3.8
27. Gaining a broader understanding and appreciation of...	4	2	4	3	0	0	2.5	1.2	NA	NA	3.7	3.5	3.7
28. Developing skill in expressing myself orally or in writing	**6**	**1**	**4**	**2**	**0**	**0**	**2.2**	**1.2**	**26**	**28**	**3.8**	**3.7**	**3.8**
29. Learning how to find and use resources for answering...	**1**	**5**	**4**	**2**	**1**	**0**	**2.8**	**1.1**	**33**	**37**	**3.7**	**3.9**	**4.0**
30. Developing a clearer understanding of, and commitment to,...	4	3	4	1	1	0	2.4	1.3	NA	NA	3.8	3.8	3.9
31. Learning to *analyze* and *critically evaluate* ideas,...	**1**	**2**	**6**	**2**	**2**	**0**	**3.2**	**1.1**	**38**	**42**	**3.8**	**3.9**	**3.9**
32. Acquiring an interest in learning more by asking my...	**2**	**3**	**4**	**1**	**3**	**0**	**3.0**	**1.4**	**36**	**39**	**3.8**	**3.9**	**3.9**

Key: 1 = No apparent progress 2 = Slight progress 3 = Moderate progress 4 = Substantial progress 5 = Exceptional progress **Bold = Selected as Important or Essential**

33. Amount of reading	2	6	5	0	0	0	2.2	0.7	37	NA	3.2	3.3	3.1
34. Amount of work in other (non–reading) assignments	2	3	8	0	0	0	2.5	0.8	34	NA	3.4	3.4	3.4
35. Difficulty of subject matter	0	1	6	5	1	0	3.5	0.8	51	NA	3.4	3.8	3.2

Key: 1 = Much Less than Most 2 = Less than Most 3 = About Average 4 = More than Most 5 = Much More than Most

36. I had a strong desire to take this course.	3	2	5	1	2	0	2.8	1.4	NA	NA	3.7	3.5	3.9
37. I worked harder on this course than on most courses I have taken.	0	1	7	2	3	0	3.5	1.0	49	NA	3.6	3.7	3.5
38. I really wanted to take a course from this instructor.	5	4	4	0	0	0	1.9	0.9	NA	NA	3.4	3.5	3.5
39. I really wanted to take this course regardless of who taught it.	2	5	4	2	0	0	2.5	1.0	34	NA	3.3	3.3	3.6
40. As a result of taking this course, I have more positive feelings...	7	2	3	1	0	0	1.8	1.1	17	15	3.9	3.8	4.0
41. Overall, I rate this instructor an excellent teacher.	3	4	4	2	0	0	2.4	1.0	22	27	4.2	4.1	4.3
42. Overall, I rate this course as excellent.	3	1	9	0	0	0	2.5	0.9	26	29	3.9	3.9	4.0
43. As a rule, I put forth more effort than other students on...	0	2	3	4	4	0	3.8	1.1	54	NA	3.6	3.9	3.9

Key: 1 = Definitely False 2 = More False than True 3 = In Between 4 = More True than False 5 = Definitely True

Additional Questions:

	1	2	3	4	5	Omit	Avg.	s.d.
48.	1	3	4	4	1	0	3.1	1.1
49.	3	6	1	2	1	0	2.4	1.3
50.	2	5	2	3	1	0	2.7	1.3
51.	1	1	5	5	1	0	3.3	1.0
52.	1	2	4	4	2	0	3.3	1.2
53.	3	2	6	2	0	0	2.5	1.1
54.	2	2	6	2	1	0	2.8	1.1
55.	3	4	5	1	0	0	2.3	0.9
56.	5	3	5	0	0	0	2.0	0.9
57.	6	5	1	1	0	0	1.8	0.9

	1	2	3	4	5	Omit	Avg.	s.d.
58.	2	6	2	3	0	0	2.5	1.1
59.	3	4	3	2	1	0	2.5	1.3
60.	7	6	0	0	0	0	1.5	0.5
61.	4	3	4	2	0	0	2.3	1.1
62.	4	5	4	0	0	0	2.0	0.8
63.	3	4	4	1	1	0	2.5	1.2
64.	0	3	2	5	3	0	3.6	1.1
65.	0	3	4	3	3	0	3.5	1.1
66.	2	5	3	1	0	2	2.3	0.9
67.	0	1	0	1	0	11	3.0	1.4

LIAO, J L

Kansas State University

Economics 000120
TU 14:30
Fall 2018
Local code: 30

IDEA Diagnostic Form Report

To learn more, see the Interpretive Guide: www.theideacenter.org/diagnosticguide.pdf

Of the 20 students enrolled, 20 responded (100%). Feedback from individual classes is always useful to guide improvement efforts. Typically, multiple classes should be used for evaluation, using more classes when they are small (fewer than 10) or when they have low response rates (less than 60%) (see www.theideacenter.org/AdminDecisions).

Summary Evaluation of Teaching Effectiveness

Teaching effectiveness is assessed in two ways: **A. Progress on Relevant Objectives**, a weighted average of student ratings of the progress they reported on objectives selected as "Important" or "Essential" (double weighted) and **B. Overall Ratings**, the average student agreement with statements that the teacher and the course were excellent. The **SUMMARY EVALUATION** is the average of these two measures. Individual institutions may prefer to combine these measures in some other manner to arrive at a summary judgment.

Converted Averages are standardized scores that take into account the fact that the average ratings for items on the IDEA form are not equal; students report more progress on some objectives than on others. Converted scores all have the same average (50) and the same variability (a standard deviation of 10); about 40% of them will be between 45 and 55. Because measures are not perfectly reliable, it is best to regard the "true score" as lying within plus or minus 3 of the reported score.

For comparative purposes, use converted averages. Your converted averages are compared with those from all classes in the IDEA database. If enough classes are available, comparisons are also made with classes in the same broad *discipline* as this class and/or with all classes that used IDEA at your *institution*. The *Interpretive Guide* offers some suggestions for using comparative results; **some institutions may prefer to establish their own "standards" based on raw or adjusted scores rather than on comparative standing**.

Both unadjusted (raw) and adjusted averages are reported. The latter makes classes more comparable by considering factors that influence student ratings, yet are beyond the instructor's control. Scores are adjusted to take into account student desire to take the course regardless of who taught it (item 39), student work habits (item 43), instructor reported class size, and two multiple item measures (student effort not attributable to the instructor and course difficulty not attributable to the instructor).

Your Average Scores

	Your Average (5-point scale)	
	Raw	Adj.
A. Progress on Relevant Objectives [1] **Four** objectives were selected as relevant (Important or Essential --see page 2)	3.4	3.4
Overall Ratings		
B. Excellent Teacher	3.7	3.8
C. Excellent Course	3.3	3.4
D. Average of B & C	3.5	3.6
Summary Evaluation (Average of A & D) [1]	**3.5**	**3.5**

[1] If you are comparing Progress on Relevant Objectives from one instructor to another, use the converted average.

[2] The process for computing Progress on Relevant Objectives for the Discipline and Institution was modified on May 1, 2006. Do not compare these results with reports generated prior to this date.

Your Converted Average When Compared to All Classes in the IDEA Database

Comparison Category	A. Progress on Relevant Objectives		Overall Ratings: B. Excellent Teacher		Overall Ratings: C. Excellent Course		Overall Ratings: D. Average of B & C		Summary Evaluation (Average of A & D)	
	Raw	Adj.	Raw	Adj.	Raw	Adj.	Raw	Adj.	Raw	Adj.
Much Higher Highest 10% (63 or higher)										
Higher Next 20% (56–62)										
Similar Middle 40% (45–55)				45						
Lower Next 20% (38–44)	39	40	42		39	41	41	43	40	42
Much Lower Lowest 10% (37 or lower)										

Your Converted Average When Compared to Your: [2]

Discipline (IDEA Data)	35	38	42	45	38	41	40	43	38	41
Institution	34	39	39	45	37	44	38	45	36	42

IDEA Discipline used for comparison:
Economics

Student Ratings of Learning on Relevant (Important and Essential) Objectives

Average unadjusted (raw) and adjusted progress ratings are shown below for those objectives you identified as "Important" or "Essential." **Progress on Relevant Objectives** (also shown on page 1) is a weighted average of student ratings of the progress they reported on objectives selected as "Important" or "Essential" (double weighted). The percent of students rating each as "1" or "2" (either "no" or "slight" progress) and as "4" or "5" ("substantial" or "exceptional" progress) is also reported. These results should help you identify objectives where improvement efforts might best be focused. Page 3 contains suggestions about the types of changes you migh consider to obtain more satisfactory results. Also, refer to the **POD–IDEA Center *Learning* Notes** (www.theideacenter.org/podidea/PODNotesLearning.html).

	Importance Rating	Your Average (5–point scale)		Percent of Students Rating		Your Converted Average When Compared to Group Averages					
						IDEA Database		IDEA Discipline[1]		Your Institution[1]	
		Raw	Adj.	1 or 2	4 or 5	Raw	Adjusted	Raw	Adjusted	Raw	Adjusted
21. Gaining factual knowledge (terminology, classifications, methods, trends)	Important	3.6	3.5	5%	55%	42 Lower	41 Lower	36 Much Lower	38 Lower	36 Much Lower	39 Lower
22. Learning fundamental principles, generalizations, or theories	Important	3.7	3.6	10%	50%	44 Lower	43 Lower	37 Much Lower	39 Lower	39 Lower	42 Lower
23. Learning to *apply* course material (to improve thinking, problem solving, and decisions)	Important	3.6	3.7	5%	55%	42 Lower	45 Similar	39 Lower	43 Lower	38 Lower	45 Similar
24. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course	Minor/None										
25. Acquiring skills in working with others as a member of a team	Important	2.6	2.7	50%	20%	28 Much Lower	30 Much Lower	28 Much Lower	32 Much Lower	22 Much Lower	29 Much Lower
26. Developing creative capacities (writing, inventing, designing, performing in art, music, drama, etc.)	Minor/None										
27. Gaining a broader understanding and appreciation of intellectual/cultural activity (music, science, literature, etc.)	Minor/None										
28. Developing skill in expressing myself orally or in writing	Minor/None										
29. Learning how to find and use resources for answering questions or solving problems	Minor/None										
30. Developing a clearer understanding of, and commitment to, personal values	Minor/None										
31. Learning to *analyze* and *critically evaluate* ideas, arguments, and points of view	Minor/None										
32. Acquiring an interest in learning more by asking my own questions and seeking answers	Minor/None										
Progress on Relevant Objectives		**3.4**	**3.4**			**39**	**40**	**35**	**38**	**34**	**39**

[1] The process for computing Progress on Relevant Objectives for the Discipline and Institution was modified on May 1, 2006. Do not compare these results with reports generated prior to this date.

Much Higher = Highest 10% of classes (63 or higher)
Higher = Next 20% (56–62)
Similar = Middle 40% (45–55)
Lower = Next 20% (38–44)
Much Lower = Lowest 10% (37 or lower)

Description of Course and Students

Students described the course by rating three items related to "level of academic challenge." Results cannot be interpreted as "good" or "bad"; in general, these ratings have a slight positive relationship with measures of academic achievement. The three items describing your students relate to their academic motivation and work habits and are key factors in developing adjusted ratings.

Course Description	Your Average (5–point scale)	Your Converted Average When Compared to Group Averages					
		IDEA Database		IDEA Discipline		Your Institution	
33. Amount of reading	2.3	37	Much Lower	29	Much Lower	40	Lower
34. Amount of work in other (non–reading) assignments	3.0	43	Lower	42	Lower	46	Similar
35. Difficulty of subject matter	3.8	57	Higher	51	Similar	60	Higher
Student Description							
37. I worked harder on this course than on most courses I have taken.	3.5	48	Similar	45	Similar	50	Similar
39. I really wanted to take this course regardless of who taught it.	3.1	45	Similar	43	Lower	40	Lower
43. As a rule, I put forth more effort than other students on academic work.	3.7	50	Similar	42	Lower	44	Lower

Much Higher = Highest 10% of classes (63 or higher)
Higher = Next 20% (56–62)
Similar = Middle 40% (45–55)
Lower = Next 20% (38–44)
Much Lower = Lowest 10% (37 or lower)

Improving Teaching Effectiveness

One way to improve teaching effectiveness is to make more use of the teaching methods closely related to learning on specific objectives.

- Review page 2 to identify the objective(s) where improvements are most desirable.
- Use the first column to answer the question, "Which of the 20 teaching methods are most related to learning on these objective(s)?"
- Review the next two columns to answer the question, "How did students rate my use of these important methods?"
- Read the last column to answer the question, "What changes should I consider in my teaching methods?"
- Beyond specific methods, do the results suggest a general area (e.g., Stimulating Student Interest) where improvement efforts should be focused?

Suggested Actions are based on comparisons with ratings for classes of similar size and level of student motivation. **Consider increasing use** means you employed the method less frequently than those teaching similar classes. **Retain current use or consider increasing** means you employed the method with typical frequency. **Strength to retain** means you employed the method more frequently than those teaching similar classes. More detailed suggestions are in the **Interpretive Guide** (**www.theideacenter.org/diagnosticguide.pdf**), **POD–IDEA Center Notes** (**www.theideacenter.org/podidea**), and **POD–IDEA Center *Learning* Notes** (**www.theideacenter.org/podidea/PODNotesLearning.html**).

Teaching Methods and Styles

	Relevant to Objectives: (see page 2)	Your Average (5–point scale)	Percent of Students Rating 4 or 5	Suggested Action
Stimulating Student Interest				
15. Inspired students to set and achieve goals which really challenged them	**All selected objectives**	**3.1**	**26%**	**Consider increasing use**
8. Stimulated students to intellectual effort beyond that required by most courses	All selected objectives	3.7	70%	Retain current use or consider increasing
4. Demonstrated the importance and significance of the subject matter	21, 22, 23	4.1	75%	Retain current use or consider increasing
13. Introduced stimulating ideas about the subject	21, 22, 23	3.9	70%	Retain current use or consider increasing
Fostering Student Collaboration				
5. Formed "teams" or "discussion groups" to facilitate learning	**25**	**3.1**	**35%**	**Consider increasing use**
16. Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own	**25**	**3.4**	**45%**	**Consider increasing use**
18. Asked students to help each other understand ideas or concepts	25	3.8	70%	Retain current use or consider increasing
Establishing Rapport				
2. Found ways to help students answer their own questions	All selected objectives	3.9	75%	Retain current use or consider increasing
7. Explained the reasons for criticisms of students' academic performance	23	3.5	65%	Retain current use or consider increasing
1. Displayed a personal interest in students and their learning	**23**	**4.5**	**95%**	**Strength to retain**
20. Encouraged student–faculty interaction outside of class (office visits, phone calls, e–mails, etc.)	Not relevant to objectives selected	4.1	80%	
Encouraging Student Involvement				
14. Involved students in "hands on" projects such as research, case studies, or "real life" activities	**25**	**3.3**	**40%**	**Consider increasing use**
19. Gave projects, tests, or assignments that required original or creative thinking	**25**	**3.6**	**55%**	**Consider increasing use**
11. Related course material to real life situations	**23**	**4.6**	**100%**	**Strength to retain**
9. Encouraged students to use multiple resources (e.g. data banks, library holdings, outside experts) to improve understanding	Not relevant to objectives selected	3.2	40%	
Structuring Classroom Experiences				
10. Explained course material clearly and concisely	**21, 22, 23**	**3.5**	**50%**	**Consider increasing use**
6. Made it clear how each topic fit into the course	21, 22, 23	4.0	75%	Retain current use or consider increasing
12. Gave tests, projects, etc. that covered the most important points of the course	**21, 22**	**4.4**	**95%**	**Strength to retain**
3. Scheduled course work (class activities, tests, projects) in ways which encouraged students to stay up–to–date in their work	Not relevant to objectives selected	4.2	85%	
17. Provided timely and frequent feedback on tests, reports, projects, etc. to help students improve	Not relevant to objectives selected	4.2	75%	

5–point Scale: 1 = Hardly Ever 2 = Occasionally 3 = Sometimes 4 = Frequently 5 = Almost Always

Statistical Detail

	Number Responding							
	1	2	3	4	5	Omit	Avg.	s.d.
1. Displayed a personal interest in students and their learning	0	0	1	9	10	0	4.5	0.6
2. Found ways to help students answer their own questions	0	1	4	11	4	0	3.9	0.8
3. Scheduled course work (class activities, tests, projects) in ways...	0	0	3	10	7	0	4.2	0.7
4. Demonstrated the importance and significance of the subject matter	0	1	4	8	7	0	4.1	0.9
5. Formed "teams" or "discussion groups" to facilitate learning	1	5	7	5	2	0	3.1	1.1
6. Made it clear how each topic fit into the course	0	1	4	9	6	0	4.0	0.9
7. Explained the reasons for criticisms of students' academic...	1	3	3	11	2	0	3.5	1.1
8. Stimulated students to intellectual effort beyond that required by...	1	1	4	11	3	0	3.7	1.0
9. Encouraged students to use multiple resources (e.g. data banks,...	3	1	8	5	3	0	3.2	1.2
10. Explained course material clearly and concisely	0	4	6	7	3	0	3.5	1.0
11. Related course material to real life situations	0	0	0	8	12	0	4.6	0.5
12. Gave tests, projects, etc. that covered the most important points...	0	0	1	11	8	0	4.4	0.6
13. Introduced stimulating ideas about the subject	0	1	5	9	5	0	3.9	0.9
14. Involved students in "hands on" projects such as research, case...	0	4	8	6	2	0	3.3	0.9
15. Inspired students to set and achieve goals which really...	1	5	8	2	3	1	3.1	1.1
16. Asked students to share ideas and experiences with others...	0	5	6	5	4	0	3.4	1.1
17. Provided timely and frequent feedback on tests, reports,...	0	0	5	6	9	0	4.2	0.8
18. Asked students to help each other understand ideas or concepts	0	2	4	10	4	0	3.8	0.9
19. Gave projects, tests, or assignments that required original or...	0	3	6	8	3	0	3.6	0.9
20. Encouraged student–faculty interaction outside of class (office...	1	1	2	8	8	0	4.1	1.1

Key: 1 = Hardly Ever 2 = Occasionally 3 = Sometimes 4 = Frequently 5 = Almost Always

The details on this page are of interest primarily to those who want to confirm scores reported on pages 1–3 or who want to determine if responses to some items were distributed in an unusual manner.

Converted Averages are reported only for relevant learning objectives (Important or Essential –see page 2) and other items for which comparisons were provided.

Notes:
Discipline code selected on FIF: 4506
Discipline code used for comparison: 4506

	Number Responding								Converted Avg.		Comparison Group Average		
	1	2	3	4	5	Omit	Avg.	s.d.	Raw	Adj.	IDEA	Discipline	Institution
21. Gaining factual knowledge (terminology,...	**1**	**0**	**8**	**8**	**3**	**0**	**3.6**	**0.9**	**42**	**41**	**4.0**	**4.2**	**4.2**
22. Learning fundamental principles, generalizations, or...	**1**	**1**	**8**	**4**	**6**	**0**	**3.7**	**1.1**	**44**	**43**	**3.9**	**4.2**	**4.2**
23. Learning to *apply* course material (to improve thinking,...	**1**	**0**	**8**	**8**	**3**	**0**	**3.6**	**0.9**	**42**	**45**	**4.0**	**4.1**	**4.2**
24. Developing specific skills, competencies, and points of view...	1	1	7	9	2	0	3.5	0.9	NA	NA	4.0	4.1	4.2
25. Acquiring skills in working with others as a member of...	**4**	**6**	**6**	**3**	**1**	**0**	**2.6**	**1.1**	**28**	**30**	**3.9**	**3.9**	**4.1**
26. Developing creative capacities (writing, inventing, designing,...	6	6	4	3	1	0	2.4	1.2	NA	NA	3.9	3.6	3.8
27. Gaining a broader understanding and appreciation of...	3	10	3	3	1	0	2.5	1.1	NA	NA	3.7	3.7	3.8
28. Developing skill in expressing myself orally or in writing	5	5	5	4	1	0	2.6	1.2	NA	NA	3.8	3.8	3.8
29. Learning how to find and use resources for answering questions...	1	4	7	6	2	0	3.2	1.1	NA	NA	3.7	3.9	4.0
30. Developing a clearer understanding of, and commitment to,...	5	4	6	3	2	0	2.7	1.3	NA	NA	3.8	3.8	3.9
31. Learning to *analyze* and *critically evaluate* ideas, arguments,...	1	6	7	5	1	0	3.0	1.0	NA	NA	3.8	4.0	4.0
32. Acquiring an interest in learning more by asking my own...	3	3	6	6	2	0	3.1	1.2	NA	NA	3.8	3.9	3.9

Key: 1 = No apparent progress 2 = Slight progress 3 = Moderate progress 4 = Substantial progress 5 = Exceptional progress **Bold = Selected as Important or Essential**

33. Amount of reading	3	9	8	0	0	0	2.3	0.7	37	NA	3.2	3.3	3.1
34. Amount of work in other (non–reading) assignments	1	3	12	3	1	0	3.0	0.9	43	NA	3.4	3.4	3.3
35. Difficulty of subject matter	1	0	6	8	5	0	3.8	1.0	57	NA	3.4	3.7	3.1

Key: 1 = Much Less than Most 2 = Less than Most 3 = About Average 4 = More than Most 5 = Much More than Most

36. I had a strong desire to take this course.	3	3	8	6	0	0	2.9	1.0	NA	NA	3.7	3.6	3.8
37. I worked harder on this course than on most courses I have taken.	2	0	7	9	2	0	3.5	1.1	48	NA	3.6	3.7	3.4
38. I really wanted to take a course from this instructor.	3	5	11	1	0	0	2.5	0.8	NA	NA	3.4	3.5	3.4
39. I really wanted to take this course regardless of who taught it.	3	1	9	6	1	0	3.1	1.1	45	NA	3.3	3.4	3.6
40. As a result of taking this course, I have more positive feelings...	2	4	7	6	1	0	3.0	1.1	36	37	3.9	3.8	4.0
41. Overall, I rate this instructor an excellent teacher.	0	2	7	7	4	0	3.7	0.9	42	45	4.2	4.1	4.3
42. Overall, I rate this course as excellent.	1	2	10	5	2	0	3.3	1.0	39	41	3.9	3.9	4.0
43. As a rule, I put forth more effort than other students on...	0	1	7	10	2	0	3.7	0.7	50	NA	3.6	3.9	3.9

Key: 1 = Definitely False 2 = More False than True 3 = In Between 4 = More True than False 5 = Definitely True

Additional Questions:

	1	2	3	4	5	Omit	Avg.	s.d.
48.	1	0	3	9	5	2	3.9	1.0
49.	2	2	3	8	3	2	3.4	1.2
50.	0	1	6	5	5	3	3.8	1.0
51.	1	2	3	4	8	2	3.9	1.3
52.	0	2	4	8	4	2	3.8	0.9
53.	0	3	7	7	1	2	3.3	0.8
54.	1	1	5	9	2	2	3.6	1.0
55.	2	5	6	4	1	2	2.8	1.1
56.	1	8	5	3	1	2	2.7	1.0
57.	2	5	7	3	1	2	2.8	1.1

	1	2	3	4	5	Omit	Avg.	s.d.
58.	3	7	5	2	1	2	2.5	1.1
59.	2	4	6	5	1	2	2.9	1.1
60.	4	5	7	1	1	2	2.4	1.1
61.	6	5	3	3	1	2	2.3	1.3
62.	7	5	3	2	1	2	2.2	1.2
63.	1	2	9	4	2	2	3.2	1.0
64.	2	3	3	7	3	2	3.3	1.3
65.	1	4	5	5	3	2	3.3	1.2
66.	2	3	6	6	1	2	3.1	1.1
67.	0	0	1	0	1	18	4.0	1.4

Teval

Teval Report: Student Ratings of Instruction

Teaching and Learning Center | Kansas State University

Faculty Member: **Liao, Jingwen**		Course #: **ECON 510**
Hr./Days: **1730 TU On Campus**	College: **Arts and Sciences**	Term: **Spring 2019**

Responses from 4 of the 4 enrolled (100%) Offered: In Class

Overall Effectiveness

	Number Responding [VL=1, VH=5]						Statistics	
	VL	L	M	H	VH	OMIT	SD[1]	AVG
Obtained Responses								
1. Overall effectiveness as a teacher	0	0	0	2	2	0	0.5	4.5
11. Increased desire to learn about the subject	0	1	1	0	2	0	1.3	3.8
14. Amount learned in the course	0	0	1	2	1	0	0.7	4.0

	Statistics		Comparative Status[2]	
	Raw	Adjusted[3]	Raw	Adjusted[3]
Averages and Comparative Status				
1. Overall effectiveness as a teacher	4.5	4.5	HM	HM
11. Increased desire to learn about the subject	3.8	4.4	M	HM
14. Amount learned in the course	4.0	4.4	M	HM

Ratings of Student Attributes and Instructional Styles

	Number Responding [VL=1, VH=5]						Statistics	
	VL	L	M	H	VH	OMIT	SD[1]	AVG
Relevant Student Attributes								
12. Interest in the course before enrolling	1	3	0	0	0	0	0.4	1.8
13. Effort to learn in the course	0	0	0	3	1	0	0.4	4.3
Instructional Styles								
A. Establishing a Learning Climate								
2. Made the course goals and objectives clear	0	0	0	1	3	0	0.4	4.8
3. Well prepared for class	0	0	0	1	3	0	0.4	4.8
5. Interest in helping students learn	0	0	0	1	3	0	0.4	4.8
10. Willingness to help outside of class	0	0	1	0	3	0	0.9	4.5
B. Facilitating Student Learning								
4. Explained the subject clearly	0	0	1	1	2	0	0.8	4.3
6. Stimulated thinking about the subject	0	0	1	1	2	0	0.8	4.3
7. Made helpful comments on student work	0	0	1	1	2	0	0.8	4.3
8. Grading procedures fair and equitable	0	0	0	1	3	0	0.4	4.8
9. Realized when students did not understand	0	0	1	0	3	0	0.9	4.5

Instructor's Description of Class

A. Type of class	Lecture
B. Class size	About right
C. Physical facilities	Satisfactory
D. Previously taught this course?	None
E. Approach significantly different this term?	
F. Description of teaching load?	Average
G. Attitude toward teaching this course	I wanted to
H. Control of course decisions	Yes- I was responsible for all decisions
I. Differences in student preparation	A minor problem
J. Student enthusiasm	Moderate; neither high nor low
K. Student effort to learn	Satisfactory
L. Additional comments?	No additional comments

[1] STANDARD DEVIATION

[2] RELATIVE TO KSU CLASSES RATED BY 10 OR MORE STUDENTS: H=UPPER 10%; HM=NEXT 20%; M=MIDDLE 40%; LM=NEXT 20%; L=LOWEST 10%

[3] ADJUSTED FOR STUDENT CHARACTERISTICS & CLASS SIZE: SEE TEVAL GUIDE

Teval

Teval Report: Student Ratings of Instruction

Teaching and Learning Center | Kansas State University

Faculty Member: **Liao, Jingwen**		Course #: **ECON 110**
Hr./Days: **1305 TU On Campus**	College: **Arts and Sciences**	Term: **Fall 2019**

Responses from 85 of the 116 enrolled (73%) Offered: In Class

Overall Effectiveness

	Number Responding [VL=1, VH=5]						Statistics	
	VL	L	M	H	VH	OMIT	SD[1]	AVG
Obtained Responses								
1. Overall effectiveness as a teacher	5	10	36	22	12	0	1.0	3.3
11. Increased desire to learn about the subject	13	17	30	13	12	0	1.2	2.9
14. Amount learned in the course	6	10	29	26	14	0	1.1	3.4

	Statistics		Comparative Status[2]	
	Raw	Adjusted[3]	Raw	Adjusted[3]
Averages and Comparative Status				
1. Overall effectiveness as a teacher	3.3	3.7	LM	LM
11. Increased desire to learn about the subject	2.9	3.5	L	M
14. Amount learned in the course	3.4	3.5	LM	LM

Ratings of Student Attributes and Instructional Styles

	Number Responding [VL=1, VH=5]						Statistics	
	VL	L	M	H	VH	OMIT	SD[1]	AVG
Relevant Student Attributes								
12. Interest in the course before enrolling	13	21	23	18	10	0	1.2	2.9
13. Effort to learn in the course	3	2	18	37	25	0	1.0	3.9
Instructional Styles								
A. Establishing a Learning Climate								
2. Made the course goals and objectives clear	1	8	25	37	14	0	0.9	3.6
3. Well prepared for class	2	4	12	37	29	1	0.9	4.0
5. Interest in helping students learn	2	4	19	36	24	0	0.9	3.9
10. Willingness to help outside of class	1	2	18	36	28	0	0.9	4.0
B. Facilitating Student Learning								
4. Explained the subject clearly	15	15	24	22	9	0	1.2	2.9
6. Stimulated thinking about the subject	5	10	30	28	12	0	1.1	3.4
7. Made helpful comments on student work	11	17	30	16	11	0	1.2	3.0
8. Grading procedures fair and equitable	6	2	12	37	28	0	1.1	3.9
9. Realized when students did not understand	12	11	25	21	16	0	1.3	3.2

Instructor's Description of Class

A. Type of class
B. Class size
C. Physical facilities
D. Previously taught this course?
E. Approach significantly different this term?
F. Description of teaching load?
G. Attitude toward teaching this course
H. Control of course decisions
I. Differences in student preparation
J. Student enthusiasm
K. Student effort to learn
L. Additional comments?

[1] STANDARD DEVIATION

[2] RELATIVE TO KSU CLASSES RATED BY 10 OR MORE STUDENTS: H=UPPER 10%; HM=NEXT 20%; M=MIDDLE 40%; LM=NEXT 20%; L=LOWEST 10%

[3] ADJUSTED FOR STUDENT CHARACTERISTICS & CLASS SIZE: SEE TEVAL GUIDE

Teval Report: Student Ratings of Instruction

Teaching and Learning Center | Kansas State University

Faculty Member: **Liao, Jingwen**	Course Name: **Prin/Macroeconomics(10880)**	Course #: **ECON 110**
Hr./Days: **930 TU On Campus**	College: **Arts and Sciences**	Term: **Spring 2020**

Responses from 40 of the 85 enrolled (47%) Offered: 04/27/20 - 05/08/20

Overall Effectiveness

	Number Responding [VL=1, VH=5]						Statistics	
	VL	L	M	H	VH	OMIT	SD[1]	AVG
Obtained Responses								
1. Overall effectiveness as a teacher	3	4	11	12	10	0	1.2	3.6
11. Increased desire to learn about the subject	6	7	6	13	8	0	1.4	3.3
14. Amount learned in the course	3	4	9	14	10	0	1.2	3.6

	Statistics		Comparative Status[2]	
	Raw	Adjusted[3]	Raw	Adjusted[3]
Averages and Comparative Status				
1. Overall effectiveness as a teacher	3.6	3.9	LM	M
11. Increased desire to learn about the subject	3.3	3.8	LM	M
14. Amount learned in the course	3.6	3.7	LM	M

Ratings of Student Attributes and Instructional Styles

	Number Responding [VL=1, VH=5]						Statistics	
	VL	L	M	H	VH	OMIT	SD[1]	AVG
Relevant Student Attributes								
12. Interest in the course before enrolling	9	4	11	10	6	0	1.4	3.0
13. Effort to learn in the course	0	0	12	15	13	0	0.8	4.0
Instructional Styles								
A. Establishing a Learning Climate								
2. Made the course goals and objectives clear	3	1	9	15	12	0	1.1	3.8
3. Well prepared for class	0	0	3	16	21	0	0.6	4.5
5. Interest in helping students learn	1	3	5	14	17	0	1.0	4.1
10. Willingness to help outside of class	1	1	3	15	20	0	0.9	4.3
B. Facilitating Student Learning								
4. Explained the subject clearly	4	6	11	10	9	0	1.3	3.4
6. Stimulated thinking about the subject	2	3	12	10	13	0	1.1	3.7
7. Made helpful comments on student work	4	7	8	11	10	0	1.3	3.4
8. Grading procedures fair and equitable	0	0	6	10	24	0	0.7	4.5
9. Realized when students did not understand	4	4	11	9	12	0	1.3	3.5

Instructor's Description of Class

A. Type of class
B. Class size
C. Physical facilities
D. Previously taught this course?
E. Approach significantly different this term?
F. Description of teaching load?
G. Attitude toward teaching this course
H. Control of course decisions
I. Differences in student preparation
J. Student enthusiasm
K. Student effort to learn
L. Additional comments?

[1] STANDARD DEVIATION
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[3] ADJUSTED FOR STUDENT CHARACTERISTICS & CLASS SIZE: SEE TEVAL GUIDE

Teval Report: Student Ratings of Instruction

Teaching and Learning Center | Kansas State University

Faculty Member: **Liao, Jingwen**	Course Name: **Prin/Macroeconomics(10880)**	Course #: **ECON 110**
Hr./Days: **930 TU On Campus**	College: **Arts and Sciences**	Term: **Spring 2020**

Additional Comments

	Additional Comments
1.	• Having previously taken a Macroeconomics class in high school this class acted more as a refresher and as a hurdle on my path to a degree. The one change I would have made was to make the homework and quizzes due at midnight the day they were due and make the quizzes only visible/available that single day.
	• I don't think a teacher should laugh or get exasperated when kids don't know an answer. A teacher should explain it better or be like it is ok next time. On top hat when we were in class we would do the questions. The kids that got the answer wrong she would get frustrated. Which is annoying because kids are just trying to learn.
	• Loved her personality and her the photos of her dog that she used as an intro for each new lesson :)
	• On campus were taught at a pace that was too fast for most students to understand. Worksheets created for online learning have been helpful.
	• When moving to online classes she didn't create the videos they were from a different professor. I didn't mind except my homework and tests had a few questions that weren't ever explained in the videos, therefore I didn't know how to do them. She also gave us TopHat quizzes during online classes, but would never tell us when the quizzes were. I think she knows the subject very well, but she just doesn't know how to effectively teach it.
	• I did not understand what was going on and she didn't use very many examples to try and help the students. When we switched to online and she was not the person talking in the powerpoints I understood better what was going on. I did not like the TopHat quizzes because you never got a notification when they were up and sometimes they would glitch. I would have preferred if she would have tried to make it more clear. I feel like she rushed through the materials when we were in class. I think it was a bad idea to make every question on the test worth 5 points because you would miss just a few and it would tank your grade. I would suggest changing that next semester.
	• Professor Liao made the transition from in class to online amazingly seamless. The amount of organization and structure and thought process was top notch and really helped me to understand the exact expectations for the rest of the semester. All material was made available in a timely fashion. The material was also structured such that I could self learn most of it without any questions. Having it electronically also allowed me to go back and review it on demand in preparation for tests.
	• I like this teacher!!!
	• Jingwen was very helpful and attentive. She was always working on different ways to explain the information to us. She was also extremely willing to work with students outside of class to help them understand the information.
	• I thought the online portion of the class was not as effective as in person classes.
	• Jingwen didn't follow university standards and guidelines for a few weeks of the semester, wouldn't tell students about assignments due, and also would go back and forth with content during lectures that would confuse herself and the students. overall not a great teacher and would honestly not take a course with this instructor again

3.2 Sample Student Comments

The following comments are some sample comments that motive me to be a better teacher.

- She is a good instructor and works hard.
- She's a very responsible instructor.
- I like seeing Dobi. I think Jingwen explains things thoroughly. She's very approachable as an instructor.
- very professional teacher
- I'm not the biggest fan of ECON, but you made the class worth coming to through your ability to explain it well, so thank you.
- Very effective teacher. In the beginning it was a little difficult to hear her, but her improvement was remarkable.
- you are the best!
- Loved her personality and her the photos of her dog that she used as an intro for each new lesson :)
- Jingwen was very helpful and attentive. She was always working on different ways to explain the information to us. She was also extremely willing to work with students outside of class to help them understand the information.
- Professor Liao made the transition from in class to online amazingly seamless. The amount of organization and structure and thought process was top notch and really helped me to understand the exact expectations for the rest of the semester. All material was made available in a timely fashion. The material was also structured such that I could self learn most of it without any questions. Having it electronically also allowed me to go back and review it on demand in preparation for tests.

4 Sample Course Materials

4.1 Introduction level course

The following sample materials include the syllabus, sample online assignments and sample test from ECON 120 as well as the rubric for students in-class debate.

ECON 120
Principles of Microeconomics

FALL 2018

Instructor

Jingwen Liao

Email

jwliao@ksu.edu

Office

Waters 244

Days & Times

Tu Th 2:30PM - 3:45PM

Classroom

Waters Hall 328

Office Hours

Tu Th 1:30 - 2:30 PM @ Waters 399B; and by appointment.

Final Exam

Wednesday, Dec. 12th, 2018, 7:30 AM - 9:20 AM @ Waters Hall 328

About this course

Welcome to Microeconomics! In most respects, this section of ECON 120 will be similar to the other sections offered at K-State. In a few, hopefully exciting ways, however, our class will be a little different. It's *smaller* (22 students maximum), and it's a class designed for first-year students only. The smaller class size should encourage an *active learning environment* throughout the semester.

Principles of Microeconomics is an introductory undergraduate course that teaches the fundamentals of microeconomics. This course will provide a solid foundation for economic analysis and thinking that can last throughout their education and subsequent professional careers. By the end of the course, students will be able to understand introductory microeconomic theory, solve basic microeconomics problems and apply the techniques to think about questions of the real economy.

Textbook:

Microeconomics (w/out Access) edition 6 or 7

by R. Glenn Hubbard and Anthony Patrick O'Brien. ISBN: 9780134106243

Tentative course outline:

Chapter 1: Economics: Foundations and Models

Chapter 2: Trade-offs, Comparative Advantage, and the Market System

Chapter 3: Where Prices Come From: The Interaction of Demand and Supply

Chapter 4: Economic Efficiency, Government Price Setting and Taxes

Chapter 6: Elasticity: The Responsiveness of Demand and Supply

Chapter 10: Consumer Choice and Behavioral Economics

Chapter 11: Technology, Production, and Costs

Chapter 12: Firms in Perfectly Competitive Markets

Course Components and Policies

Your grade is based on:

Homework assignments	210
Quizzes	50
Presentation	40
Midterm exam 1	200
Midterm exam 2	200
Comprehensive Final Exam	300
Total	1000

Grading in this course will be standard (90%+ = A, 80%+ = B, etc), although a curve may be applied as necessary. The curve would only be applied if it would be beneficial for you grade.

Homework assignments: You will have about 7-8 assignments during the semester, Homework assignments will be offered either through Canvas online or through paper in class. Due time for the HW will be announced in class and on the HW. Make sure you submit your HW on time.

Quizzes: There will be **unannounced** quizzes in class apply to your total score. No make-up quiz will be offered, so you will miss the points if you are not in the class on the day of the quiz.

Presentation: Topics and schedule will be announced in class.

Exams: The exam dates will be announced in advance in class. A missed examination will result in a zero for that test. *Makeup exams are not given under any circumstances.* In case of a certifiable personal emergency, contact me before the test data/time. With sufficient proof of the reason for you absence, you may be allowed to replace one test grade with the average of other test scores. However, this is not standard procedure and will require a documented appeal.

Attendance: Students are expected to attend all classes for the full length of the class period. Your accomplishments and grades are highly linked to your attendance of the class.

Student Learning Outcomes

Upon successful completion of a first-year seminar, students will be able to:

Think critically

Explain the implications and/or significance of material learned in the course.

Communicate effectively

Express their own understanding of course content in respectful dialogue with others and with engagement, imagination and self-reflection.

Build community

Interact effectively with faculty and peers to learn and to help others to learn.

Apply learning

Use the skills and knowledge learned in the class to solve problems.

Co-curricular Activities

GPS Scavenger Hunt

K-State Challenge Course

Joe Tiao Lecture

ECON Club Events

Other important statements

Statement Regarding Academic Honesty: Kansas State University has an Honor and Integrity System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor and Integrity System. The policies and procedures of the Honor and Integrity System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. The Honor and Integrity System website can be reached via the following URL: www.k-state.edu/honor. A component vital to the Honor and Integrity System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

Statement Regarding Students with DisabilitiesStudents: with disabilities who need classroom accommodations, access to technology, or information about emergency building/ campus evacuation processes should contact the Student Access Center and/or their instructor.

Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the Student Access Center at accesscenter@k-state.edu, 785-532-6441; for K-State Polytechnic campus, contact Academic and Student Services at polytechnicadvising@ksu.edu or call 785-826-2974.

Statement Defining Expectations for Classroom Conduct: All student activities in the University, including this course, are governed by the Student Judicial Conduct Code as outlined in the Student Governing Association By Laws, Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

Weapons Policy Statement: The language in the following statement should not be altered if faculty choose to use it. However, the sentence in the second to last paragraph may be omitted if it is not applicable to a particular course, and if applicable, specific example activities can be inserted into the sentence where shown. Kansas State University prohibits the possession of firearms, explosives, and other weapons on any University campus, with certain limited exceptions, including the lawful concealed carrying of handguns, as provided in the University Weapons Policy, found at http://www.k-state.edu/police/weapons/index.html. You are encouraged to take the online weapons policy education module (http://www.k-state.edu/police/weapons/index.html) to ensure you understand the requirements of the policy, including the requirements related to concealed carrying of handguns on campus. Students possessing a concealed handgun on campus must be 21 years of age or older and otherwise lawfully eligible to carry. All carrying requirements of the policy must be observed in this class, including but not limited to the requirement that a concealed handgun be completely hidden from view, securely held in a holster that meets the specifications of the policy, carried without a chambered round of ammunition, and that any external safety be in the "on" position. If an individual carries a concealed handgun in a personal carrier such as a backpack, purse, or handbag, the carrier must remain within the individual's exclusive and uninterrupted control. This includes wearing the carrier with a strap, carrying or holding the carrier, or setting the carrier next to or within the immediate reach of the individual. During this course, you will be required to engage in activities, such as (INSERT YOUR EXAMPLE), that may require you to separate from your belongings, and thus you should plan accordingly. Each individual who lawfully possesses a handgun on campus shall be wholly and solely responsible for carrying, storing and using that handgun in a safe manner and in accordance with the law, Board policy and University policy. All reports of suspected violation of the weapons policy are made to the University Police Department by picking up any Emergency Campus Phone or by calling 785-532-6412.

Name_____

ECON 120 Homework 6
Due in class Tuesday May. 1st, 2018

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) If an airport decides to expand by building an additional passenger terminal, and in doing so it lowers its average cost per airplane landing, then the expansion would provide _____ to the airlines. 1) _____
   A) economies of scale
   B) diseconomies of scale
   C) higher average costs but lower total costs
   D) higher marginal costs but lower total costs

Table 11–7

Quantity of Lanterns	Fixed Cost (dollars)	Variable Cost (dollars)	Total Cost (dollars)	Average Total Cost (dollars)
75	200	170	370	4.93
80	200	230	430	5.36
90	200			7.67
100	200	810		
115	200			11.8
117	200	1264	1464	12.5
120	200	1480		

Table 11–7 shows cost data for Lotus Lanterns, a producer of whimsical night lights.

2) ***Refer to Table 11–7.*** What is the variable cost of production when the firm produces 115 lanterns? 2) _____
   A) $1,556 B) $1,157 C) $956 D) $10.05

3) ***Refer to Table 11–7.*** What is the average total cost of production when the firm produces 120 lanterns? 3) _____
   A) $1,680 B) $72 C) $14 D) $12.3

4) ***Refer to Table 11–7.*** What is the average variable cost per unit of production when the firm produces 90 lanterns? 4) _____
   A) $490 B) $33.67 C) $7.67 D) $5.44

5) ***Refer to Table 11–7.*** What is the marginal cost per unit of production when the firm produces 100 lanterns? 5) _____
   A) $420 B) $32 C) $11.1 D) $8.1

6) The River Rouge plant was built by the Ford Motor Company in the 1920s to produce the company's Model A car. Which of the following is evidence that the River Rouge plant suffered from diseconomies of scale? 6) _____

A) Despite an expensive advertising campaign the Model A did not earn the company a profit.
B) Model A cars made at the River Rouge plant failed to earn Ford a profit. Ford eventually constructed smaller plants to make the Model A at a lower average cost.
C) Model A cars made at the River Rouge plant failed to earn a profit. Ford reduced the average cost of the Model A by cutting its employees' wages.
D) Model A cars made at the River Rouge plant failed to earn a profit because the price of steel used to manufacture the Model A rose when workers in the steel industry went on strike.

7) Which of the following is a reason why a firm would experience diseconomies of scale? 7) _____

A) To finance an increase in the size of its plant a firm must borrow more money or sell more shares of stock.
B) As the size of the firm increases, it becomes more difficult to find markets where it doesn't already have operations.
C) As the size of the firm increases it becomes more difficult to coordinate the operations of its manufacturing plants.
D) As the size of the firm increases, it must operate in other countries where differences in language, customs, and laws increase its average costs.

Table 11–1

Number of Workers	Mushrooms per Day (pounds)
1	12
2	30
3	45
4	50
5	54
6	56

Table 11–1 shows the technology of production at the Matsuko's Mushroom Farm for the month of May.

8) ***Refer to Table 11–1.*** What is the marginal product of the 4th worker? 8) _____

A) 137 pounds B) 50 pounds C) 12.5 pounds D) 5 pounds

9) ***Refer to Table 11–1.*** What is the average product of labor when the farm hires 5 workers? 9) _____

A) 4 pounds B) 10.8 bushels C) 38.2 pounds D) 54 pounds

10) ***Refer to Table 11–1.*** Diminishing marginal returns sets in when the _____ worker is hired. 10) _____

A) 2nd
B) 3rd
C) 4th
D) None of the above; the production function displays increasing marginal returns.

11) Which of the following statements is true? 11) _____
A) The average product of labor is at its maximum when the average product of labor equals the marginal product of labor.
B) The average product of labor is at its minimum when the average product of labor equals the marginal product of labor.
C) The average product of labor tells us how much output changes as the quantity of workers hired changes.
D) Whenever the marginal product of labor is greater than the average product of labor the average product of labor must be decreasing.

12) If a firm's long-run average total curve shows that it can produce 5,000 DVDs at an average cost of $2.00 and 15,000 DVDs at an average cost of $1.50, this is evidence of 12) _____
A) diminishing returns.
B) economies of scale.
C) diseconomies of scale.
D) the law of supply.

13) Average fixed costs of production 13) _____
A) remain constant.
B) will rise at a fixed rate as more is produced.
C) graph as a U-shaped curve.
D) fall as long as output is increased.

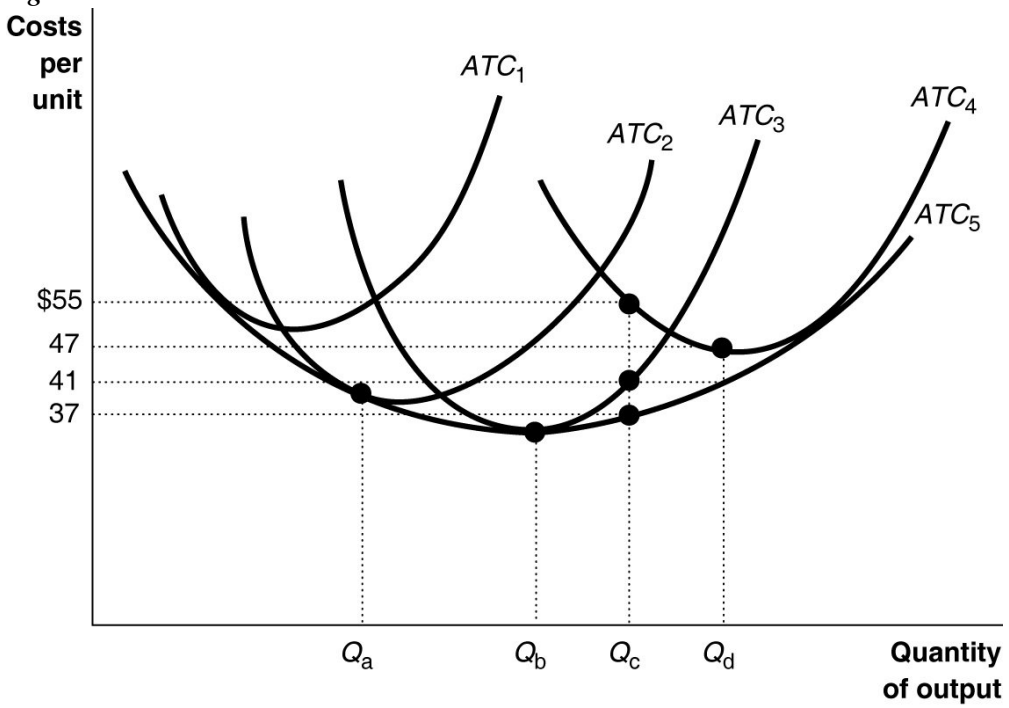
14) If average total cost is $50 and average fixed cost is $15 when output is 20 units, then the firm's total variable cost at that level of output is 14) _____
A) $1,000.
B) $700.
C) $300.
D) impossible to determine without additional information.

15) Economies of scale exist as a firm increases its size in the long run because of all of the following *except* 15) _____
A) the firm can afford more sophisticated technology in production.
B) labor and management can specialize even further in their tasks.
C) as a larger input buyer, the firm can purchase inputs at a lower per unit cost.
D) as a firm expands its production, its profit margin per-unit of output increases.

16) If four workers can produce 18 chairs a day and five can produce 20 chairs a day, the marginal product of the fifth worker is 16) _____
A) 2 chairs.
B) 3 chairs.
C) 4 chairs.
D) 38 chairs.

17) If, when a firm doubles all its inputs, its average cost of production decreases, then production displays 17) _____
A) diminishing returns.
B) economies of scale.
C) diseconomies of scale.
D) declining fixed costs.

Figure 11–10



18) ***Refer to Figure 11–10.*** Suppose for the past 8 years the firm has been producing Q_d units per period using plant size ATC_4. Now, following a permanent change in demand, it plans to cut production to Q_c units. What will happen to its average cost of production? 18) _____

A) In the short run, its average cost falls from $47 to $41, and in the long run, average cost falls even further to $37.
B) In the short run, its average cost rises from $47 to $55, and in the long run, average cost falls to $41.
C) In the short run, its average cost falls from $47 to $37, and in the long run, average cost rises to $41.
D) In the short run, its average cost rises from $47 to $55, and in the long run, average cost falls to $37.

19) Which of the following is an implicit cost of production? 19) _____

A) the loss in the value of capital equipment due to wear and tear
B) the salary you pay yourself for running your business
C) the utility bill paid to water, electricity, and natural gas companies
D) the interest you pay your mother for the money she loaned you to start your business

Table 11–8

Quantity (sets)	Long–Run Average Cost
100	$40
200	35
300	30
400	30
500	35

Elegant Settings manufactures stainless steel cutlery. Table 11–8 shows the company's cost data.

20) ***Refer to Table 11–8.*** Elegant Settings experiences 20) _____
A) economies of scale up to an output level of 400.
B) diminishing returns up to an output level of 400.
C) increasing returns beyond an output level of 400.
D) economies of scale at an output of 300 or less and diseconomies of scale at an output level above 400.

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

21) Refer to Table 11–6. Alicia Gregory owns a foot massage business. She leases 4 computer–controlled massage booths, for which she pays $125 per day. She cannot increase the number machines she leases without giving the manufacturer 3 months notice. She can hire as many workers as she wants at a cost of $75 per day per worker. These are the only two inputs she uses in her business. Use this information to fill in the columns in the above table.

Table 11–6

Quantity of workers	Quantity of foot massages per day	Fixed cost	Variable cost	Total cost	Average total cost	Marginal cost
0	0					
1	10					
2	25					
3	45					
4	60					
5	70					

21) 21) _____

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

22) Alice quit her job as an auto mechanic earning $60,000 per year to start her own business. To save money she operates her business out of a small building she owns which, until she started her own business, she had rented out for $15,000 per year. She also invested her $30,000 savings (which earned a market interest rate of 5% per year) in her business. You are given the following information about the first year of her operations.

Total revenue	$120,000
Cost of labor	50,000
Cost of materials	10,000
Equipment rental	8,000

a. Calculate her economic costs.
b. Calculate her accounting costs.
c. Calculate her implicit costs.
d. Alice tells you that she would really like to move to a location closer to town but she decided against it because "right now I don't pay any rent and it will cost me $15,000 a year to rent near town." Do you agree with her reasoning?

ECON 120 Name_____

Midterm Exam 2 Student ID_____

Instruction

- You have 75 minutes to finish the exam. This exam contains two parts: 45 Multiple Choice questions and 10 True and False questions.
- Calculator is allowed, however, do not use a phone as a calculator.
- Do not listen to MP3 players while taking exam.
- Keep your eyes on your own test.
- There is only one answer per question.
- Turn in the whole exam copy when you are finished.

Good luck!

MULTIPLE CHOICE. (4 points each)

1) Which of the following is explained by the law of diminishing marginal utility? 1) _____
   A) The marginal utility of Isabel's second bottle of Coca-Cola is greater than the marginal utility of her third bottle of Coca-Cola.
   B) The marginal utility of Isabel's second bottle of Coca-Cola is greater than the marginal utility of her third pretzel.
   C) The marginal utility of Isabel's second bottle of Coca-Cola is greater than the marginal utility of her friend Margie's third pretzel.
   D) The total utility of one bottle of Coca-Cola is greater than the total utility of two bottles of Coca-Cola.

2) The marginal utility per dollar that Harold Stratton receives from oranges is greater than the marginal utility per dollar Harold receives from pears. To maximize his utility, what should Harold do? 2) _____
   A) He should acquire more income so that he can afford to buy more oranges and pears.
   B) He should reduce his consumption of both oranges and pears so that he can buy a greater variety of goods.
   C) He should buy fewer pears and more oranges.
   D) He should buy fewer oranges and more pears.

3) The actual division of the burden of a tax between buyers and sellers in a market is called 3) _____
   A) tax incidence. B) tax liability. C) tax bearer. D) tax parity.

4) Which of the following products comes closest to having a perfectly inelastic demand? 4) _____
   A) gasoline B) cholesterol medication in general
   C) iPhones D) bus rides

5) Jonah lives in a small town where there is only one Mexican restaurant. Which of the following is likely to be true about the price elasticity of demand for meals at the Mexican restaurant? 5) _____
   A) Demand is likely to be perfectly inelastic.
   B) Demand is likely to be perfectly elastic.
   C) Demand is likely to be relatively elastic.
   D) Demand is likely to be relatively inelastic.

6) If the demand for a product is perfectly inelastic, a decrease in the price of the product 6) _____
   A) will increase total revenue. B) will decrease total revenue.
   C) will not change total revenue. D) any of the above are possible.

7) If the price of muffins, a normal good you enjoy, rises, then 7) _____
   A) the income and substitution effects offset each other but the price effect leads you to buy fewer muffins.
   B) both the income and substitution effects lead you to buy fewer muffins.
   C) the substitution effect which causes you to decrease your muffin consumption outweighs the income effect which causes you to increase your muffin consumption, resulting in fewer muffins purchased.
   D) the income effect which causes you to decrease your muffin consumption outweighs the substitution effect which causes you to increase your muffin consumption, resulting in fewer muffins purchased.

8) Consider a downward-sloping demand curve. When the price of a normal good decreases, the income and substitution effects 8) _____
A) work in the same direction to increase quantity demanded.
B) work in the same direction to decrease quantity demanded.
C) work in opposite directions and quantity demanded increases.
D) work in opposite directions and quantity demanded decreases.

9) The income effect of a decrease in the price of macaroni and cheese (assume this is an inferior good) results in 9) _____
A) a decrease in the demand for macaroni and cheese.
B) an increase in the quantity of macaroni and cheese demanded.
C) a decrease in the quantity of macaroni and cheese demanded.
D) an increase in the demand for macaroni and cheese.

10) The substitution effect of an increase in the price of peaches is 10) _____
A) the change in the quantity demanded that results from a change in the price of peaches, making peaches more expensive relative to other goods, holding constant the effect of the price change on consumer purchasing power.
B) the change in the demand for nectarines (a substitute good) that results when peaches become more expensive relative to nectarines, holding constant the effect of the price change on consumer purchasing power.
C) the change in the quantity of peaches demanded that results from the effect of the change in the price of peaches on the consumer's purchasing power.
D) the change in the demand for peaches that results when the price of peaches increases.

11) If, when you consume another piece of candy, your marginal utility is zero, then 11) _____
A) you want more candy.
B) you have maximized your total utility from consuming candy.
C) you have not yet reached the point of diminishing marginal utility.
D) you should consume less candy.

12) In making decisions about what to consume, a person's goal is to 12) _____
A) allocate her limited income among all the products she wishes to buy so that she receives the highest total utility.
B) buy low-priced goods rather than high-priced goods.
C) maximize her marginal utility from the goods and services she wishes to buy using her limited income.
D) consume as many necessities as possible and then, if there is money left over, to buy luxuries.

13) Suppose a hurricane decreased the supply of oranges so that the price of oranges rose from $120 a ton to $180 a ton and quantity sold decreased from 800 tons to 240 tons. What is the absolute value of the price elasticity of demand? (Use midpoint formula) 13) _____
A) 0.11 B) 0.37 C) 2.69 D) 9.33

14) Which of the following would result in a higher absolute value of the price elasticity of demand for a product? 14) _____
A) A wide variety of substitutes are available for the good.
B) The time period under consideration is short.
C) The good is a necessity.
D) The expenditure on the good is small relative to one's budget.

15) Suppose the cross-price elasticity of demand between grapefruit juice and orange juice is approximately 6. What does this mean? 15) _____
A) A 1 percent decrease in the price of grapefruit juice leads to a 6 percent increase in orange juice consumption.
B) A 6 percent increase in the price of grapefruit juice leads to a 1 percent increase in orange juice consumption.
C) If the price of grapefruit juice rises by $1, 6 more cartons of orange juice will be purchased.
D) The demand for orange juice is 6 times greater than the demand for grapefruit juice.

16) If the cross-price elasticity of demand between Breeze Detergent and Faber Detergent is a relatively large positive number, then it indicates that 16) _____
A) the two brands are probably made by the same company.
B) the two brands of detergent are close substitutes.
C) consumers have a distinct preference for one brand versus the other.
D) detergents are necessities.

17) Rank these three items in terms of the elasticity of the demand for them at any given price, from most elastic to least elastic: hot beverages, coffee and Peet's Coffee. 17) _____
A) hot beverages, coffee, Peet's Coffee
B) Peet's Coffee, coffee, hot beverages
C) coffee, Peet's Coffee, hot beverages
D) coffee, hot beverages, Peet's Coffee

18) Bringing oil to the market is a relatively long and costly process. The whole process from exploration to pumping significant amounts of oil can take years. What does this indicate about the price elasticity of supply for oil? 18) _____
A) The elasticity coefficient is likely to be very high and supply is inelastic.
B) The elasticity coefficient is likely to be close to zero and supply is perfectly elastic.
C) The elasticity coefficient is likely to be low and supply is highly inelastic.
D) The elasticity coefficient is likely to be low and supply is highly elastic.

19) Linesha, a college student working part-time received a wage increase. An avid movie buff, she increased her purchases of Blu-ray discs and reduced her purchases of DVDs. Based on this information 19) _____
A) DVDs and Blu-ray discs are substitutes.
B) Blu-ray discs are normal goods and DVDs are inferior goods.
C) DVDs and Blu-ray discs are normal goods.
D) the cross-price elasticity between DVDs and Blu-ray discs is negative.

20) If a firm raised its price and discovered that its total revenue fell, then the demand for its product is 20) _____
A) perfectly inelastic.
B) relatively inelastic.
C) perfectly elastic.
D) relatively elastic.

21) Which of the following explains why a firm would be interested in knowing the price elasticity of demand for a good it sells? 21) _____

A) The price elasticity of demand can be used to determine the impact of changes in income on quantity sold.
B) Knowing the price elasticity of demand allows the firm to determine how the cost of producing additional units of the good will change.
C) Knowing the price elasticity of demand allows the firm to calculate how changes in the price of the good will affect the firm's total profit.
D) The price elasticity of demand allows the firm to calculate how changes in the price of the good will affect the firm's total revenue.

22) Suppose a 4 percent increase in price results in a 2 percent increase in the quantity supplied of a good. Calculate the price elasticity of supply and characterize the product. 22) _____

A) 2; The product is elastic.
B) 0.2; The product is inelastic.
C) 0.5; The product is inelastic.
D) 50%; The product is inelastic.

23) The price elasticity of supply for umbrellas is 2. Suppose you're told that following a price increase, quantity supplied increased by 30 percent. What was the percentage change in price that brought this about? 23) _____

A) 60 percent
B) 15 percent
C) 6.7 percent
D) impossible to determine without additional information

24) If the quantity of walkie-talkies supplied increases by 5 percent when price increases by 12 percent, then 24) _____

A) the supply of walkie-talkies is inelastic.
B) the supply of walkie-talkies is elastic.
C) the walkie-talkie supply curve will shift to the right.
D) the walkie-talkie supply curve will shift to the left.

25) The larger the share of a good in a consumer's budget, holding everything else constant, the 25) _____

A) more price elastic is a consumer's demand.
B) more vertical is a consumer's demand curve.
C) more price inelastic is a consumer's demand.
D) more unit elastic is a consumer's demand.

26) Suppose a price floor on sparkling wine is proposed by the Health Minister of the country of Vinyardia. What will be the likely effect on the market for sparkling wine in Vinyardia? 26) _____

A) Quantity demanded will decrease, quantity supplied will increase, and a surplus will result.
B) Quantity demanded will increase, quantity supplied will decrease, and a surplus will result.
C) Quantity demanded will decrease, quantity supplied will increase, and a shortage will result.
D) Quantity demanded will increase, quantity supplied will decrease, and a shortage will result.

27) If at a price of $24, Octavia sells 36 home-grown orchids and at $30 she sells 24 home-grown orchids, the demand for her orchids is 27) _____
A) elastic. B) inelastic.
C) unit elastic. D) perfectly elastic.

28) Economists estimated that the price elasticity of beer is -0.30 and the income elasticity of beer is 0.09. This means that 28) _____
A) an increase in the price of beer will increase the quantity demanded of beer and beer is a normal good.
B) an increase in the price of beer will lead to an increase in revenue for beer sellers and beer is a normal good.
C) a decrease in the price of beer will lead to an increase in revenue for beer sellers and beer is an inferior good.
D) an increase in the price of beer will lead to a decrease in the quantity demanded of beer and beer is a luxury.

29) Assume that the market for barley is in equilibrium and the demand for barley is inelastic. Predict what happens to the revenue of barley farmers if a prolonged drought reduces the supply of barley. The drought will cause farm revenue to 29) _____
A) rise because there will be a shortage of barley.
B) rise because the percentage decrease in quantity sold is less than the percentage increase in price.
C) rise because the percentage increase in quantity sold is greater than the percentage increase in price.
D) fall because of the decrease in the quantity of barley sold.

Figure 4–5

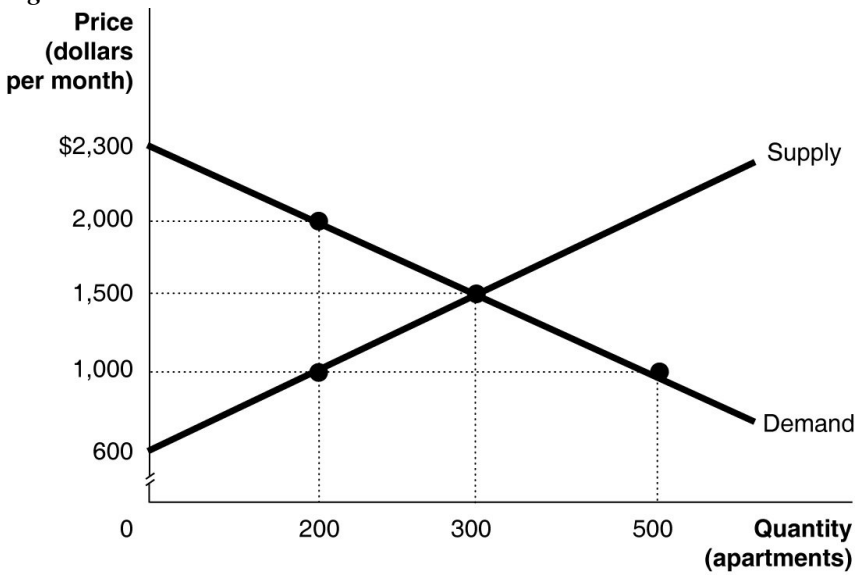


Figure 4–5 shows the market for apartments in Springfield. Recently, the government imposed a rent ceiling of $1,000 per month.

30) ***Refer to Figure 4–5.*** What is the value of consumer surplus after the imposition of the ceiling? 30) _____
A) $120,000 B) $230,000 C) $270,000 D) $430,000

31) ***Refer to Figure 4–5.*** What is the value of the deadweight loss after the imposition of the ceiling? 31) _____
A) $50,000 B) $125,000 C) $175,000 D) $260,000

32) ***Refer to Figure 4–5.*** What is the value of the portion of producer surplus transferred to consumers as a result of the rent ceiling? 32) _____
A) $40,000 B) $100,000 C) $125,000 D) $140,000

Figure 4–6

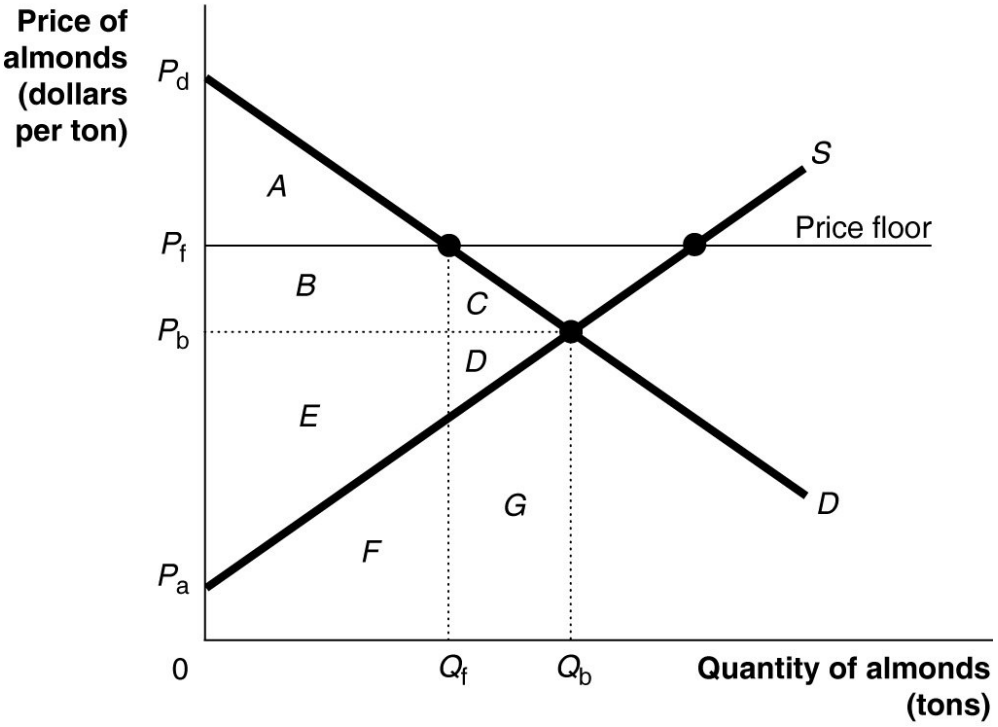


Figure 4–6 shows the demand and supply curves for the almond market. The government believes that the equilibrium price is too low and tries to help almond growers by setting a price floor at P_f.

33) ***Refer to Figure 4–6.*** What area represents the portion of consumer surplus that has been transferred to producer surplus as a result of the price floor? 33) _____
A) *B* B) *B* + *C* C) *B* + *E* D) *E*

34) ***Refer to Figure 4–6***. What is the area that represents producer surplus after the imposition of the price floor? 34) _____
A) *A* + *B* + *E* B) *B* + *E* C) *B* + *E* + *F* D) *B* + *C* + *D* + *E*

35) ***Refer to Figure 4–6***. What area represents consumer surplus after the imposition of the price floor? 35) _____
A) *A* + *B* + *E* B) *A* + *B* C) *A* + *B* + *E* + *F* D) *A*

Figure 4–8

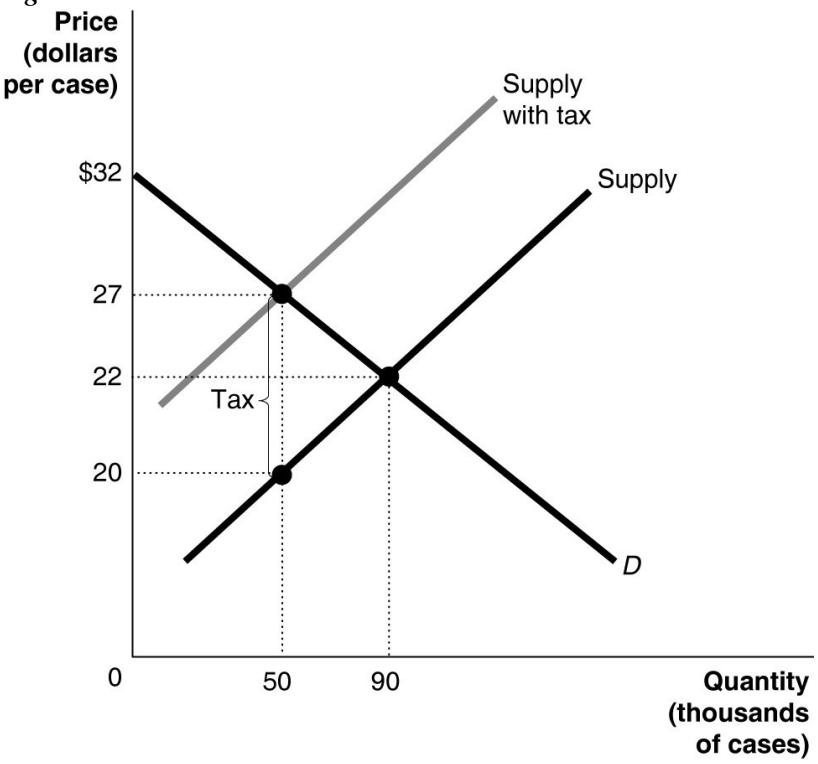


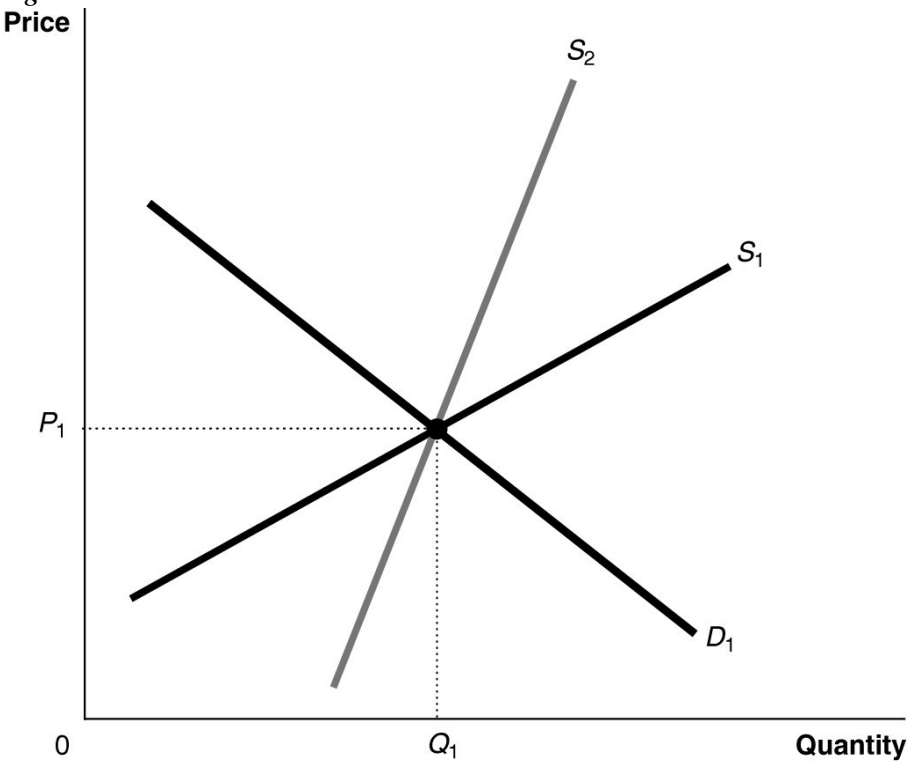
Figure 4–8 shows the market for beer. The government plans to impose a per-unit tax in this market.

36) ***Refer to Figure 4–8.*** The price buyers pay after the tax is 36) _____
A) $7. B) $20. C) $22. D) $27.

37) ***Refer to Figure 4–8.*** As a result of the tax, is there a loss in consumer surplus? 37) _____
A) Yes, because consumers pay a price above the economically efficient price.
B) No, because the producer pays the tax.
C) No, because the market reaches a new equilibrium
D) No, because consumers are charged a lower price to cover their tax burden.

38) ***Refer to Figure 4–8.*** How much of the tax is paid by sellers? 38) _____
A) $2 B) $5 C) $7 D) $12

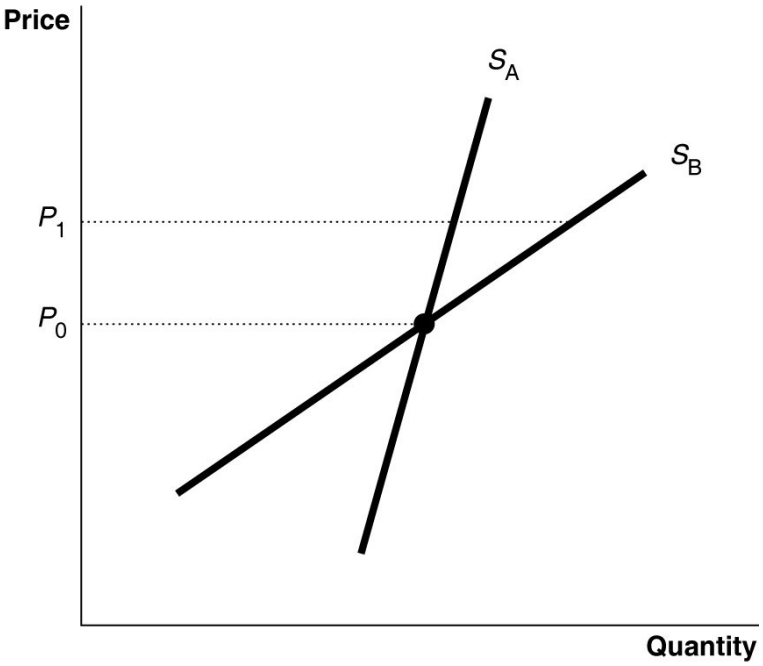
Figure 4–9



39) ***Refer to Figure 4–9.*** Suppose the market is initially in equilibrium at price P_1 and now the government imposes a tax on every unit sold. Which of the following statements best describes the impact of the tax? For demand curve D_1 39) _____

A) the producer bears a greater share of the tax burden if the supply curve is S_2.
B) the producer bears a greater share of the tax burden if the supply curve is S_1.
C) the producer's share of the tax burden is the same whether the supply curve is S_1 or S_2.
D) the producer bears the entire burden of the tax if the supply curve is S_1 and the consumer bears the entire burden of the tax if the supply curve is S_2.

Figure 6 –12



40) ***Refer to Figure 6 –12.*** The diagram shows two supply curves, S_A and S_B. As price rises from P_0 to P_1, which supply curve is more elastic? 40) _____

A) S_A
B) S_B
C) They are equally inelastic.
D) They are equally elastic.

41) ***Refer to Figure 6 –12.*** Suppose the diagram shows the supply curves for a product in the short run and in the long run. Which supply curve represents supply in the short run and which curve represents supply in the long run? 41) _____

A) S_B represents supply in the short run and S_A represents supply in the long run.
B) Either S_A or S_B could represent supply in the short run; in the long run the supply curve must be a vertical line.
C) Either S_A or S_B could represent supply in the long run; in the short run the supply curve must be a horizontal line.
D) S_A represents supply in the short run and S_B represents supply in the long run.

Table 10–3

	Ice Cream Cones	Lime Fizz Soda
Quantity	***MU***	***MU***
1	30	40
2	25	35
3	20	26
4	15	18
5	10	15
6	5	7

42) ***Refer to Table 10–3.*** The table above shows Lee's marginal utility from consuming ice cream cones and cans of Lime Fizz Soda. Select the phrase that completes the following statement. "We can determine the number of ice cream cones and cans of Lime Fizz Soda Lee should consume to maximize his utility 42) _____
A) if we know what Lee's income is."
B) if we know what Lee's income is and the price of an ice cream cone and the price of a can of Lime Fizz Soda."
C) by adding up the marginal utilities for ice cream cones and Lime Fizz Soda."
D) if we know the values of the marginal utility per dollar for ice cream cones and Lime Fizz Soda."

Table 10–7

Quantity of Beer (glasses)	Total Utility	Quantity of Pizza (slices)	Total Utility
1	25	1	20
2	45	2	35
3	60	3	45
4	65	4	50
5	69	5	52
6	70	6	52

Table 10–7 shows Antonio's utility from beer and pizza.

43) ***Refer to Table 10–7.*** What is Antonio's marginal utility from consuming the fifth beer? 43) _____
A) 4 utils B) 13.6 utils C) 69 utils D) 134 utils

44) ***Refer to Table 10–7.*** Suppose Antonio has $10 to spend and the price of beer = $2 per glass and the price of pizza = $2 per slice. How many of each good will he consume when he maximizes his utility? 44) _____
A) 2 glasses of beer, 1 slice of pizza
B) 2 glasses of beer, 3 slices of pizza
C) 3 glasses of beer, 2 slices of pizza
D) 4 glasses of beer, 5 slices of pizza

Table 6–5

Hourly Rental Rate (dollars)	Quantity Demanded (hours)
$60	40
75	32
80	30
100	24

45) ***Refer to Table 6–5.*** Katie Graham owns a kayak rental service in Santa Barbara. Table 6.5 shows her estimated demand schedule for kayak rentals per week. She would like to increase her sales revenue by changing the price she charges for rentals. At present she charges $75. Based on the information in the table, Katie 45) _____

A) is not able to increase her revenue by changing her price because the demand for kayak rentals is unit elastic.
B) should lower her price to $60 to increase her revenue because the demand for kayak rentals is price elastic.
C) should raise her price to $80 to increase her revenue because the demand for kayak rentals is price inelastic.
D) should raise her price to earn the most revenue.

TRUE/FALSE. (2 points each)

46) A consumer maximizes her total utility from a bundle of goods when her marginal utility from each good is equal. 46) _____

47) The division of the burden of a tax between buyers and sellers in a market is called tax allocation. 47) _____

48) A price ceiling is a legally determined maximum price that sellers may charge. 48) _____

49) Necessities tend to have more inelastic demands than luxuries. 49) _____

50) When Audrina raised the price of her homemade cookies, her total revenue increased. This suggests that the demand for Audrina's cookies is elastic. 50) _____

51) There are a limited number of original Picasso paintings. This means that the supply of original Picasso paintings is perfectly elastic. 51) _____

52) A recent study indicated that "Stricter college alcohol policies such as raising the price of alcohol, or banning alcohol on campus, decreases the number of students who use marijuana." This indicates that the cross-price elasticity between alcohol and marijuana is positive. 52) _____

53) If the market for a product is narrowly defined, then there are likely to be many substitutes for the product and the demand for the product is relatively elastic. 53) _____

54) If the demand for a product is elastic, the quantity demanded changes by a larger percentage than the percentage change in price. 54) _____

55) Suppose the supply curve for digital cameras shifts to the right. This will cause a relatively large decrease in the price of digital cameras if both demand and supply are inelastic. 55) _____

Appendix - Midpoint Formula

Percentage change in price = $\frac{p_2 - p_1}{\frac{(p_2 + p_1)}{2}}$

Percentage change in quantity = $\frac{Q_2 - Q_1}{\frac{(Q_2 + Q_1)}{2}}$

Econ 120 - Debate Rubric					
Category	**Presidential Debates**	**The senate Floor**	**Student Council Election**	**Not Yet**	**Score**
	10 to 9	**8 to 6**	**5 to 3**	**2 to 1**	**-**
Addresses Issues	Always addresses topic	Usually addresses topic	Rarely addresses topic	Did not address topic	
Support with Facts	Uses many facts that support topic	Uses some facts that support topic	Uses few facts that support topic	Does not use facts	
Persuasiveness	Arguments clear and convincing	Arguments are sometimes clear and convincing	Arguments are rarely clear and convincing	Arguments are never clear	
Teamwork	Used team member effectively, equal timing	One member does the talking 75% of the time	One member does the talking 100% of the time	No one talks	
Organization	Electrifies audience in opening statement, closure convinces audience	Grabs attention, vrings closure to the debate	Introduces topic and brings some closure to the debate	Does not introduce topic, no closure	
				Total	

4.2 Intermediate level course

The following sample materials include the syllabus, sample assignments and sample test from ECON 510.

K-State Department of Economics

ECON 510
Intermediate Macroeconomics
Spring 2019

Instructor: Jingwen Liao
Email: jwliao@ksu.edu
Class hours / location: TuTh 5:30PM - 7:55PM / Waters 333
Office: Waters 244
Office hours: TBD**;** and by appointment.

Course Description

Macroeconomics is the study of the economy as a whole. This course aims to help you study economy-wide phenomena, like the growth rate of a country's total economic output, or the percentage increase in overall prices (the inflation rate), or the fraction of the labor force that is looking for work but cannot find a job (the unemployment rate). As a participant in an economy, and as a citizen in a democracy, you cannot help but think about economic issues as you go about your life. The goal of study economics is to refine your thinking. As Albert Einstein said:

"The whole of science is nothing more than a refinement of everyday thinking."

Prerequisites

ECON 110 - Principles of Macroeconomics. Any introductory algebra course is highly recommended.

Textbook

MACROECONOMICS (10th Edition), by N. Gregory Mankiw, Worth publishers. ISBN: 978-1319106003

Grading

Homework assignments	200
Quizzes	50
Exam 1	200
Exam 2	200
Exam 3	200
Total	850

Letter grades are based on a curve, but cutoffs will be no higher than 90% for an "A", 80% for a "B", 70% for a "C", 60% for a "D", and less than 60% for an "F". The exact dates of exams and due dates for homework assignments will be announced in class.

Homework assignments: You will have about 6 HWs in the semester. The lowest grade of the HWs will be dropped and the remaining grades will be added up and applied to your final grade. You will usually be given 7 days to complete a homework assignment. Homework assignments will be offered either through Canvas online or through the paper in class. Due time for the HW will be announced in class and on the HW. Make sure you submit your HW on time.
Late submission policy:10% deduction.

Quizzes:
There will be **unannounced quizzes** in class, 5 quizzes at the maximum. **No make-up quiz will be offered**, so you will miss the quiz point if you are not in the class on the day of the quiz.

Exams:
There will be 3 exams this semester. Exam 3 will be the final exam and it is not comprehensive. The tentative exam dates are shown in the course schedule; however, the dates except for exam 3 are subject to change based on the process of the class. Confirmed exam dates will be announced in class at least a week before the exam. **No Make-up exams will be offered**. In case of a certifiable personal emergency, contact me before the test data/time. With sufficient proof of the reason for your absence, you may be allowed to replace one test grade with the average of other test scores.

Attendance Policy

Students are expected to attend all classes for the full length of the class period. Your accomplishments and grades are highly linked to your attendance in the class.

Tentative course schedule

	Date	Topics
Week 1	Tue. (1/22)	Chapter 1/Chapter 2: Introduction
	Thu. (1/24)	Chapter 3: National Income
Week 2	Tue. (1/29)	Chapter 4: The Monetary System
	Thu. (1/31)	Chapter 5: Inflation
Week 3	Tue. (2/5)	**Exam 1**
	Thu. (2/7)	Chapter 7: Unemployment and the Labor Market
Week 4	Tue. (2/12)	Chapter 8: Economics Growth I
	Thu. (2/14)	Chapter 9: Economics Growth II
Week 5	Tue. (2/19)	Chapter 10: Introduction to Economic Fluctuation
	Thu. (2/21)	**Exam 2**
Week 6	Tue. (2/26)	Chapter 11: Aggregate Demand I
	Thu. (2/28)	Chapter 12: Aggregate Demand II
Week 7	Tue. (3/5)	Chapter 14: Aggregate Supply
	Thu. (3/7)	**Exam 3***

***Exam 3 will be the final exam**: Thursday, March 7th from 5:30 – 7:55 at Waters 333.

Help!!!

Any questions you might have with this course are more than welcome. Email is the preferred way to contact me, and I encourage you to come and visit me in my office hour or after class. Office hours are listed above but if they don't work for you, feel free to e-mail me and set up a time to meet.

Tutoring

- Tuesdays at 5:30-7: 00 pm in Waters 350
- Wednesdays at 7:00-8: 30 pm in Waters 132

Statement Regarding Academic Honesty

Kansas State University has an Honor and Integrity System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor and Integrity System. The policies and procedures of the Honor and Integrity System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. The Honor and Integrity System website can be reached via the following URL: www.k-state.edu/honor. A component vital to the Honor and Integrity System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates a failure in the course; the X indicates the reason is an Honor Pledge violation.

Statement Regarding Students with Disabilities

Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the Student Access Center at accesscenter@k-state.edu, 785-532-6441; for K-State Polytechnic campus, contact Academic and Student Services at polytechnicadvising@ksu.edu or call 785-826-2974.

Statement Defining Expectations for Classroom Conduct

All student activities in the University, including this course, are governed by the Student Judicial Conduct Code as outlined in the Student Governing Association By Laws, Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

Statement Regarding Diversity

"Respect for Diversity: It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you." (Source: University of Iowa College of Education)

Name: _____

ECON 510 Intermediate Macroeconomics
Homework #3
Due: in class Tuesday, Feb. 19th, 2019

1. Suppose that 150 cups of coffee are sold in given year at $2 per cup. And the quantity of money in the economy is $30. The velocity is____.

2. If there are 100 transactions in a year and the average value of each transaction is $10, then if there is $200 of money in the economy, transactions velocity is _____ times per year.
A) 0.2
B) 2
C) 5
D) 10

3. If the money supply increases 12 percent, velocity decreases 4 percent, and the price level increases 5 percent, then the change in real GDP must be _____ percent.
A) 3
B) 4
C) 9
D) 11

4. If the average price of goods and services in the economy equals $10 and the quantity of money in the economy equals $200,000, then real balances in the economy equal:
A) 10.
B) 20,000.
C) 200,000.
D) 2,000,000.

5. If the demand for real money balances is proportional to real income, velocity will:
A) increase as income increases.
B) increase as income decreases.
C) vary directly with the interest rate.
D) be constant.

6. When people want to hold _____ money, the income velocity of money increases, and the money demand parameter *k* _____ .
A) more; increases
B) less; increases

C) more; decreases
D) less; decreases

7. Consider the money demand function that takes the form $M / P = kY$, where M is the quantity of money, P is the price level, k is a constant, and Y is real output. If the money supply is growing at a 10 percent rate, real output is growing at a 3 percent rate, and k is constant, what is the average inflation rate in this economy?
A) 3 percent
B) 7 percent
C) 10 percent
D) 13 percent

8. The quantity theory of money assumes that:
A) income is constant.
B) velocity is constant.
C) prices are constant.
D) the money supply is constant.

9. In the long run, according to the quantity theory of money and classical macroeconomic theory, if velocity is constant, then _____ determines real GDP and _____ determines nominal GDP.
A) the productive capability of the economy; the money supply
B) the money supply; the productive capability of the economy
C) velocity; the money supply
D) the money supply; velocity

10. Percentage change in P is approximately equal to the percentage change in:
A) M.
B) M minus the percentage change in Y.
C) M minus the percentage change in Y plus the percentage change in velocity.
D) M minus the percentage change in Y minus the percentage change in velocity.

11. The inflation tax is paid:
A) only by the central bank.
B) by all holders of money.
C) only by government bond holders.
D) equally by every household.

12. If the real interest rate and real national income are constant, according to the quantity theory and the Fisher effect, a 1 percent increase in money growth will lead to rises in:

A) inflation of 1 percent and the nominal interest rate of less than 1 percent.
B) inflation of 1 percent and the nominal interest rate of 1 percent.
C) inflation of 1 percent and the nominal interest rate of more than 1 percent.
D) both inflation and the nominal interest rate of less than 1 percent.

13. According to the quantity theory of money and the Fisher equation, if the money growth increases by 3 percent and the real interest rate equals 2 percent, then the nominal interest rate will increase:
A) 2 percent.
B) 3 percent.
C) 5 percent.
D) 6 percent.

14. When a person purchases a 90-day Treasury bill, he or she cannot know the:
A) *ex post* real interest rate.
B) *ex ante* real interest rate.
C) nominal interest rate.
D) expected rate of inflation.

15. The *ex ante* real interest rate is equal to the nominal interest rate:
A) minus the inflation rate.
B) plus the inflation rate.
C) minus the expected inflation rate.
D) plus the expected inflation rate.

16. If the real return on government bonds is 3 percent and the expected rate of inflation is 4 percent, then the cost of holding money is _____ percent.
A) 1
B) 3
C) 4
D) 7

17. Consider the money demand function that takes the form $(M / P)^{d} = Y / (4i)$, where M is the quantity of money, P is the price level, Y is real output, and i is the nominal interest rate. What is the average velocity of money in this economy?
A) i
B) 4
C) $1 / (4i)$
D) 0.25

18. If the money supply is held constant, then an increase in the nominal interest rate will _____ the demand for money and _____ the price level.
A) increase; increase
B) increase; decrease
C) decrease; increase
D) decrease; decrease

19. If velocity is constant and, in addition, the factors of production and the production function determine real GDP, then:
A) the price level is proportional to the money supply.
B) real GDP is proportional to the money supply.
C) the price level is fixed.
D) nominal GDP is fixed.

20. Variables expressed in terms of money are called _____ variables.
A) real
B) nominal
C) endogenous
D) exogenous

21. An example of a real variable is the:
A) dollar wage a person earns.
B) quantity of goods produced in a year.
C) price level.
D) nominal interest rate.

22. The costs of reprinting catalogs and price lists because of inflation are called:
A) menu costs.
B) shoeleather costs.
C) variable yardstick costs.
D) fixed costs.

23. According to the classical dichotomy, when the money supply decreases, _____ will decrease.
A) real GDP
B) consumption spending
C) the price level
D) investment spending

24. In the classical model, according to the quantity theory of money and the Fisher equation, an

increase in money growth increases:
A) output.
B) velocity.
C) the nominal interest rate.
D) the real interest rate.

25. Which of the following would most likely be called a hyperinflation?
A) Price increases averaged 300 percent per year.
B) The inflation rate was 10 percent per year.
C) Real GDP grew at a rate of 12 percent over a year.
D) A stock market index rose by 1,000 points over a year.

26. Assume that the demand for real money balance (M / P) is $M / P = 0.6Y - 100i$, where Y is national income, and i is the nominal interest rate (in percent). The real interest rate r is fixed at 3 percent by the investment and saving functions. The expected inflation rate equals the rate of nominal money growth.
    a. If Y is 1,000, M is 100, and the growth rate of nominal money is 1 percent, what must i and P be?
    b. If Y is 1,000, M is 100, and the growth rate of nominal money is 2 percent, what must i and P be?

27. Assume an economy where only burgers are traded. In a year, 100 burgers are traded at the rate of $5 per burger. Assume two scenarios:
    a. The economy has $100 in the form of 20 $5 bills.
    b. The economy has $100 in the form of 100 $1 bills.
    Calculate the velocity of money for both situations.

28. For a country A, the GDP growth rate is 8 percent and inflation is 4 percent. If the velocity of money remains constant, what is the change in real money balances?

ECON 510 Name_____

Exam 2 Student ID_____

Instruction

- You have 75 minutes to finish the exam. This exam contains two parts: 25 Multiple Choice questions and 3 Short Answer questions.
- Calculator is allowed, however, do not use a phone as a calculator.
- Do not listen to MP3 players while taking exam.
- Keep your eyes on your own test.
- There is only one answer per multiple choice question.
- Turn in the whole exam copy when you are finished.

Good luck!

Part 1. Multiple Choice. (5 points each)

1. The quantity theory of money assumes that:
A) income is constant.
B) velocity is constant.
C) prices are constant.
D) the money supply is constant.

2. Hyperinflations ultimately are the result of excessive growth rates of the money supply; the underlying motive for the excessive money growth rates is frequently a government's:
A) desire to increase prices throughout the economy.
B) need to generate revenue to pay for spending.
C) responsibility to increase nominal interest rates by increasing expected inflation.
D) inability to buy government securities through open-market operations.

3. The *ex post* real interest rate will be greater than the *ex ante* real interest rate when the:
A) rate of inflation is increasing.
B) rate of inflation is decreasing.
C) actual rate of inflation is greater than the expected rate of inflation.
D) actual rate of inflation is less than the expected rate of inflation.

4. The *ex ante* real interest rate is based on _____ inflation, while the *ex post* real interest rate is based on _____ inflation.
A) expected; actual
B) core; actual
C) actual; expected
D) expected; core

5. Consider the money demand function that takes the form $M / P = kY$, where M is the quantity of money, P is the price level, k is a constant, and Y is real output. If the money supply is growing at a 10 percent rate, real output is growing at a 3 percent rate, and k is constant, what is the average inflation rate in this economy?
A) 3 percent
B) 7 percent
C) 10 percent
D) 13 percent

6. If income velocity is assumed to be constant, but no other assumptions are made, the level of _____ is determined by M.
A) prices
B) real GDP
C) transactions

D) nominal GDP

7. In the Solow model with technological progress, the steady-state growth rate of output per worker is:

A) 0.
B) g.
C) n.
D) $n + g$.

8. In the Solow growth model the total income equals investment:

A) minus depreciation.
B) plus saving.
C) plus consumption.
D) plus depreciation.

9. With population growth at rate n and labor-augmenting technological progress at rate g, the Golden Rule steady state requires that the marginal product of capital (*MPK*):

A) net of depreciation be equal to $n + g$.
B) net of depreciation be equal to the depreciation rate plus $n + g$.
C) plus n be equal to the depreciation rate plus g.
D) plus g be equal to the depreciation rate plus n.

10. In the Solow growth model, investment equals:

A) output.
B) consumption.
C) the marginal product of capital.
D) saving.

11. An increase in the rate of population growth with no change in the saving rate:

A) increases the steady-state level of capital per worker.
B) decreases the steady-state level of capital per worker.
C) does not affect the steady-state level of capital per worker.
D) decreases the rate of output growth in the short run.

12. Suppose an economy is initially in a steady state with capital per worker exceeding the Golden Rule level. If the saving rate falls to a rate consistent with the Golden Rule, then in the transition to the new steady state, consumption per worker will:

A) always exceed the initial level.
B) first fall below then rise above the initial level.
C) first rise above then fall below the initial level.
D) always be lower than the initial level.

13. Percentage change in P is approximately equal to the percentage change in:
A) M.
B) M minus the percentage change in Y.
C) M minus the percentage change in Y plus the percentage change in velocity.
D) M minus the percentage change in Y minus the percentage change in velocity.

14. According to the quantity theory of money and the Fisher equation, if the inflation increases by 3 percent and the real interest rate equals 2 percent, then the nominal interest rate will increase:
A) 2 percent.
B) 3 percent.
C) 5 percent.
D) 6 percent.

15. If the demand for money depends on the nominal interest rate, then via the quantity theory and the Fisher equation, the price level depends on:
A) only the current money supply.
B) only the expected future money supply.
C) both the current and expected future money supply.
D) neither the current nor the expected future money supply.

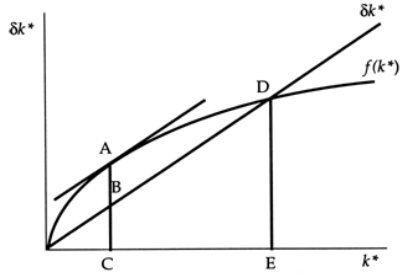
16. In the classical model, according to the quantity theory of money and the Fisher equation, an increase in money growth increases:
A) output.
B) velocity.
C) the nominal interest rate.
D) the real interest rate.

17. If the per-worker production function is given by $y = k^{1/2}$, the saving rate (s) is 0.2, and the depreciation rate is 0.1, then the steady-state capital per worker is:
A) 1.
B) 2.
C) 4.
D) 9.

18. Assume that two economies are identical in every way except that one has a higher saving rate. According to the Solow growth model, in the steady state the country with the higher saving rate will have _____ level of output per person and _____ rate of growth of output per worker compared to the country with the lower saving rate.
A) the same; the same

B) the same; a higher
C) a higher; the same
D) a higher; a higher

19. Exhibit: Steady-State Consumption II



The Golden Rule level of steady-state investment per worker is:
A) AC.
B) AB.
C) BC.
D) DE.

20. With a per-worker production function $y = k^{1/2}$, the steady-state capital stock per worker (k^*) as a function of the saving rate (s) and depreciation rate (δ) is given by:
A) $k^* = (s / \delta)^2$.
B) $k^* = (\delta / s)^2$.
C) $k^* = s / \delta$.
D) $k^* = \delta / s$.

21. If an economy is in a steady state with a saving rate below the Golden Rule level, efforts to increase the saving rate result in:
A) both higher per-capita output and higher per-capita depreciation.
B) both lower per-capita output and lower per-capita depreciation.
C) higher per-capita output and lower per-capita depreciation.
D) lower per-capita output and higher per-capita depreciation.

22. In the Solow growth model, an economy in the steady state with a population growth rate of n but no technological growth will exhibit a growth rate of output per worker at rate:
A) 0.
B) n.
C) d.
D) (n + d).

23. In the Solow growth model with population growth but no technological progress, the

steady-state amount of investment can be thought of as a break-even amount of investment because the quantity of investment just equals the amount of:
A) output needed to achieve the maximum level of consumption per worker.
B) capital needed to replace depreciated capital and to equip new workers.
C) saving needed to achieve the maximum level of output per worker.
D) output needed to make the capital per worker ratio equal to the marginal product of capital.

24. In the Solow growth model with population growth but no technological progress, if in the steady state the marginal product of capital equals 0.10, the depreciation rate equals 0.05, and the rate of population growth equals 0.03, then the capital per worker ____ the Golden Rule level.
A) is above
B) is below
C) is equal to
D) will move to

25. According to the quantity theory of money, if money is growing at a 10 percent rate and real output is growing at a 3 percent rate, but velocity is growing at increasingly faster rates over time as a result of financial innovation, the rate of inflation must be:
A) increasing.
B) decreasing.
C) 7 percent.
D) constant.

Part 2. Short Answer.

26. For a country A, the GDP growth rate is 10 percent and inflation is 6 percent. If the velocity of money remains constant, what is the change in real money balances?

27. The economy of Alpha can be described by the Solow growth model. The following are some characteristics of the Alpha economy:

saving rate (s)	0.20
depreciation rate (d)	0.12
steady-state capital per worker (k)	4
population growth rate (n)	0.02
steady-state output per worker	20,000

a. What is the steady-state growth rate of output per worker in Alpha?

b. What is the steady-state growth rate of total output in Alpha?

c. What is the level of steady-state consumption per worker in Alpha?

d. What is the steady-state level of investment per worker in Alpha?

e. Use a graph with k on the horizontal axis to show the steady state.

28. Assume that a country's production function is $Y = 5K^{0.4}L^{0.6}$. The ratio of capital to output is 5, the growth rate of output is 2 percent, and the depreciation rate is 3 percent. Capital is paid its marginal product.

a. What is the marginal product of capital in this situation? (Hint: The marginal product of capital may be computed using calculus by differentiating the production function and using the capital–output ratio or by using the fact that capital's share equals MPK multiplied by K divided by Y.)

b. If the economy is in a steady state, what must be the saving rate?

c. If the economy decides to achieve the Golden Rule level of capital and actually reaches it, what will be the marginal product of capital?