SEAN MULHOLLAND smulholl@mail.aum.edu

Texts: N. Gregory Mankiw. Principles of Economics, 3rd Edition

<u>Objective</u>: Learn to think in a manner consistent with the existence of scarcity, with special emphasis on growth, inflation, unemployment, and business cycles.

Office Hours: You are encouraged to ask questions during and after class. If you want to speak with me at length or need assistance, I am usually available in my office, School of Business 324-J, from 3:00 – 5:30 Tuesdays and Wednesdays, and by appointment. Set up an appointment by calling (244-3989) or emailing me. I will work around your schedule.

<u>Examinations and Homework</u>: There will be two in-term exams and one final exam, which will account for 80% of your grade. The weights are as follows:

EXAM & HOMEWORK	<u>WEIGHT</u>
Homework	20%
First Exam	20%
Second Exam	30%
Final Exam	30%

These exams will consist of multiple-choice questions. All exams will be cumulative and comprehensive, with emphasis placed on the material presented after the previous exam. The use of calculators is prohibited.

No make-ups for the in-term exams will be given. If you miss one in-term exam, its weight will automatically shift to the other exams (including the Final), at no penalty to you. No exam grades will be dropped. If you choose to take an exam, the grade you receive will become part of your average for the class. If you miss more than one in-term exam, I reserve the right to either give you a zero on one or both missed exams, or require additional work from you.

<u>Homework Assignments</u> (**HM**) will consist of the remaining 20% of your grade and will be due on the dates listed on the calendar. These assignments will consist of essay and short answer questions that reinforce the topics discussed in class. Homework can be done alone or in groups of up to four. If a group works on the homework together, only *one set* of questions and answers should be turned in for the individual group members. This way everyone in the group will receive exactly the same grade for the assignment. Absolutely **NO** late homework assignments will be accepted.

<u>Grading</u>: Academic regulations and procedures as found in the *AUM Catalog* govern all grading and academic policies. Because each class, homework, and exam is unique, the grading scale may vary. This is a rough idea of the scale you can expect:

$$85 - 100 = A$$
 $70 - 84 = B$ $55 - 69 = C$ $45 - 54 = D$ $45 = F$

The actual grading scale will be determined only at the end of the semester.

<u>Grade Disputes</u>: Any course grade dispute must be initiated within five weeks of the grade being posted, in accordance with University and School policies.

Attendance: If I plan to give a worthless lecture, I will cancel class. Attendance is not required, though highly recommended. Initially, I will take role as an inexpensive way to learn your names. If I am late, please wait 10 minutes before leaving the classroom. Please switch all phones and pagers to vibrate. If you are late, minimize your disturbance.

Students with Disabilities: As a Faculty member in the School of Business I will make every reasonable effort to accommodate the unique and special needs of students with respect to speech, hearing, vision, seating, or other possible disabilities. During the first week of class please contact me if you require special accommodations and I, along with representatives from the Center for Special Services, will work with you.

<u>Academic Integrity:</u> Academic dishonesty will be treated per the stated regulations in the AUM Student Handbook. All work must be your own or the groups own as it pertains to homework done by a group. It is <u>your responsibility</u> to ensure that you are not in conflict with the stated regulations.

I reserve the right to make adjustments to the syllabus at any time during the course.

NOTE 1: All chapter numbers refer to Mankiw.

NOTE 2: Reading assignments may be changed at any time. I will announce any changes in class.

NOTE 4: Exam dates are shown in boldface, thus: 8, 21, 29

NOTE 5: Homework (20% of your grade) due dates are in boldface, thus: 6, 19, 27

Date	Readings	Topic	
	_	Scarcity; Models; Comparative Advantage; Opportunity Cost; Gains From	
30-Jun	3	Trade, Review of Demand and Supply	
		HM#1 Assign ; Applications of Demand & Supply; Gross Domestic Product;	
1-July	4, 23	Price Level; Real GDP	
5-July		July 4 th Holiday	
6-July	24, 27(583-586)	HM#1 Due; Inflation; Interest Rates; Present Value; Wealth	
7-July	25, Notes	Review	
8-July	3-4, 23-25	FIRST EXAM: THURSDAY, July 8	
12-July	26	Long Run Equilibrium; Technology and Growth	
13-July	27(586-597)	HM#2 Assign; Savings and Investment; Financial System	
14-July	28	Unemployment, Minimum Wage and Union Bargaining	
15-July	29, Notes	Monetary System: Monetary Base; Money Multiplier; Federal Reserve Tools	
19-July	29, Notes	HM#2 Due; Federal Reserve Tools	
20-July	29, 30	Money & Inflation; Review	
21-July	All to date	SECOND EXAM: Wednesday, July 21	
22-July	33, 34	HM#3 Assign; Agg. Demand and Supply; Monetary and Fiscal Policy on AD	
26-July	Notes	Growth Rates: Output and Inflation	
27-July	Notes	HM#3 Due Monetary Policy, Part 2	
28-July	31	Balance of Trade; Exchange Rates; PPP	
29-July	All to date	FINAL EXAM: Thursday, July 29th	

- 1. An "increase in demand" for a good refers to
 - a. A movement along the demand curve for that good
 - b. An increase in the desired rate of consumption, due to a lower price for that good
 - c. A shift to the left of the demand curve for that good
 - d. A shift to the right of the demand curve for that good
 - e. Both a & b are correct

Questions 2 through 4 are based on the following information:

Consider the nations of Columbia and Peru. Each is capable of producing coffee beans and star fruit. If Columbia spends all of its time on producing coffee bean production, it can produce a maximum of 15 coffee beans, leaving no time for star fruit production. Or, if Columbia spends all of its time on star fruit production, it can produce 30 star fruit, leaving no time for coffee bean production.

Peru is capable of producing a maximum of 10 coffee beans if it spends all its time on coffee bean production. If Peru spends all its time producing star fruit, it can produce 30 star fruit a day, leaving no time for coffee bean production. Both Columbia and Peru are capable of producing any linear combination of these (for example Columbia could choose to produce 13 coffee beans and 4 star fruit.) Also assume that Columbia and Peru can use their time only to produce these goods.

- 2. Who is the low cost producer of coffee beans?
 - a. Peru, because it can produce the largest number of coffee beans in a day
 - b. Columbia, because it can produce the largest number of coffee beans in a day
 - c. Peru, because it must sacrifice only one third (1/3) of a star fruit to grow a coffee bean
 - d. Columbia, because it must sacrifice only two (2) star fruit to grow a coffee bean
 - e. Neither, because they both have the same cost of producing coffee beans
- 3. Who has the comparative advantage at producing star fruit?
 - a. Peru, because it can produce the largest number of star fruit
 - b. Columbia, because it can produce the least of them
 - c. Columbia, because it must sacrifice only one half (1/2) of a coffee bean to make one star fruit
 - d. Peru, because it is the low cost producer of star fruit
 - e. Both b and c are correct
- 4. Who has the absolute advantage a producing star fruit?
 - a. Peru, because it is the low cost producer of star fruit
 - b. Peru, because it is the low cost producer of coffee bean
 - c. Columbia, because it is the low cost producer of coffee bean
 - d. Columbia, because it is the low cost producer of star fruit
 - e. None of the above
- 5. Researchers find that consuming oranges can <u>increase</u> the likelihood of cancer by 80%. What happens to the price and quantity (respectively) of oranges?
 - a. an increase; a decrease
 - b. an increase; an increase
 - c. a decrease; a decrease
 - d. uncertain; an increase
 - e. none of the above

Questions 6 & 7 are based on the following: Consider a world in which there are just three goods: houses, apples, and SUVs. Listed below are the prices and quantities of these goods produced in the base year and the current year.

		Base Year	Current Year
Houses			
	Price	12	15
	Quantity	300	400
apples	-		
	Price	2	2
	Quantity	400	600
SUVs			
	Price	4	8
	Quantity	100	100

- 6. Using the GDP Deflator calculation, what is the current year price level?
 - a. 0.85
 - b. 1.00
 - c. 1.10
 - d. 1.20
 - e. 1.25
- 7. Using the GDP Deflator calculation, what is the price level of the base year?
 - a. 0.85
 - b. 1.00
 - c. 1.10
 - d. 1.20
 - e. 1.25

Questions 1 & 2 are based on the following information are based on the inhabitants of Tatooine:

2000 creatures live there

500 are 16 are under

800 are employed

300 are not employed and are not looking for work

400 are not employed but are looking and available for work

1. The labor force of Tatooine is:

- f. 400
- 700 g.
- 1100 h.
- 1200 i.
- 1500 j.

The labor force participation rate is:

- 33% a.
- 40% b.
- 55% c.
- d. 60%
- 80% e.

If GDP is \$6.0 trillion dollars a year and people hold \$1.0 trillion dollars a year, we can say that

- the desired cash-balance ratio, k, equals 1/6
- the desired cash balance ratio, k, equals 6
- Average income for 2 months is what people want to hold as cash
- None of the above d.
- Only a & c are correct

If the Federal Reserve doubles the reserve requirement ratio, equilibrium GDP in the long run will

- Fall, because the money supply will fall
- Fall, because the money supply will rise
- Rise, because the money supply will rise
- Remain unchanged, because aggregate demand will not change
- Rise, because the money supply will fall

Questions 5 - 8 can be answered using the following information about the Island of Doolin:

$$\frac{\mathbf{w}}{\mathbf{w}} = 3 \cdot \mathbf{L}$$

 $_{Supply\;of\;Labor\;:}\;\;p$

$$\frac{\text{w}}{}$$
 = 250 – 7 · L

Demand for Labor: p

Output:
$$Q = L^{1/2} \cdot K^{1/2} = \sqrt{L} \cdot \sqrt{K}$$
, with $K = 64$

What is the real wage of the workers on the Island of Doolin?

- 25 a.
- b. 50
- 75 c.
- d. 100
- none of the above

How many inhabitants of the Island of Doolin are working?

- 10 b.
- c. 16
- d. 20
- none of the above

If the amount of capital, K, is equal to 64, how much output is being produced on the Island of Doolin?

- 16 a.
- b. 24
- c. 32
- d. 40
- 48 e.

8.	If the Price Level, P, equ	als 8, the Money Supply equals 64	, and the desired cash balance	ratio equals 0.2, what is	the output in the economy?
	20				

- 20 a.
- 30 b.
- 35
- c. d. 38
- The Ebola virus, a fast killing virus, kills half of the population in the county of Chad. Assuming that the money supply remains fixed, we can say that
 - Price Level will rise in the short-run
 - Output will fall in the short run b.
 - Real Wages will fall in the short-run c.
 - All of the above d.
 - Only a & b are correct
- 10. If Alan Greenspan increases the monetary base, which of the following will happen?
 - Interest rate i, will increase
 - The demand for bonds will increase
 - The price level will increase in the short-run c.
 - Only a & c are correct
 - Only b & c are correct
- 11. Suppose the Federal Reserve increases the reserve requirement for banks in the United States. We can say that
 - Unemployment will increase in the short-run
 - Input usage will increase in the short-run
 - Price Level will fall in the short-run
 - Only a & c are correct d.
 - Only b & c are correct

- 1. If the growth rate of the money supply is 5%, the growth rate of the desired cash balance ratio is 0%, and the steady state growth of output is 3%, what is the inflation rate?
 - a. 5%
 - b. 3%
 - c. 8%
 - d. 2%
 - e. none of the above
- 2. Which of the following could cause a decrease in Aggregate demand?
 - a. An increase "autonomous" consumption spending
 - b. A decrease "autonomous" investment spending
 - c. An increase in "useful" government spending paid for by an increase in current taxes
 - d. All of the above
 - e. None of the above
- 3. If the inflation rate is 3%, the growth rate of the money multiplier is 0%, and the growth rate of GDP is 2%, what is the growth in real income?
 - a. 5%
 - b. 2%
 - c. 1%
 - d. -1%
 - e. You do not have enough information to answer the question
- 4. Using the Dynamic Model, what happens to the growth rate of the price level and output, respectively, in the Short-run and Intermediate step relative to the initial equilibrium, if the Federal Reserve increases the growth rate of the money supply?
 - a. SR: increases, increases; Intermediate: increases, increases
 - b. SR: decreases, increases; Intermediate: decreases, decreases
 - c. SR: increases, increases; Intermediate: decreases, decreases
 - d. SR: increases, increases; Intermediate: increases, decreases
 - e. SR: increases, decreases; Intermediate: increases, decreases
- 5. Using the Dynamic Model, what happens to the growth rate of the price level and output, respectively, in the Short-run and Intermediate step relative to the initial equilibrium, if the growth rate of the desired cash balance ratio increases?
 - SR: decreases, decreases: Intermediate: decreases, increases
 - b. SR: decreases, decreases; Intermediate: increases, decreases
 - c. SR: decreases, decreases; Intermediate: decreases, decreases
 - d. SR: decreases, increases; Intermediate: increases, decreases
 - e. SR: increases, decreases; Intermediate: increases, decreases
- 5. If "Autonomous Spending" increases, we can say that
 - a. The nominal interest rate, i, will increase
 - b. Aggregate demand will decrease
 - c. Price level will increase in the long run
 - d. Only a & c are correct
 - e. Only a & b are correct
- 7. An increase in "useful" government spending, matched by a decrease in "worthless" government spending exactly equal in value will cause
 - a. An increase in output in the short run
 - b. Higher prices in the short run
 - c. Higher prices in the long run
 - d. All of the above
 - e. None of the above
- 8. If Alan Greenspan increases the monetary base, which of the following will happen?
 - a. Interest rate i, will increase
 - b. The demand for bonds will increase
 - c. The price level will increase in the short-run
 - d. Only a & c are correct
 - e. Only b & c are correct
- 9. Suppose the Federal Reserve increases the reserve requirement for banks in the United States. We can say that
 - a. Unemployment will increase in the short-run
 - b. Input usage will increase in the short-run
 - c. Price Level will fall in the short-run
 - d. Only a & c are correct
 - e. Only b & c are correct
- 10. If a General Motors bond brings a 7% annual return, the nominal return on a US Treasury bond that is not inflation indexed is 4%, and the real interest rate is 2%, what is the expected annual inflation rate and default risk on General Motors bond, respectively?
 - a. 2%, 3%
 - b. 2%, 2%
 - c. 4%, 1%
 - d. 4%, 3%
 - e. 3%, 4%

- 11. Increases in the rate of interest
 - a. increases the present value of future events
 - b. changes the relative present value of short lived assets compared to long lived assets
 - c. decreases the present value of the short lived assets divided by the present value of the long lived asset
 - d. Increases the demand for longer lived assets
 - e. All of the above
- 12. If you are given the choice between \$100 now or \$200 in one year, you should
 - a. Choose the \$200 if the interest rate is less than 100%
 - b. Choose the \$100 if the interest rate is more than 100%
 - c. Be indifferent between them if the interest rate is exactly 100%
 - d. All of the above
 - e. None of the above
- 13. Suppose you have the right to receive a perpetuity with annual payments of \$2700. Unfortunately, your crazy uncle Willy owed some debts as well, and in the settlement the bank will get the payment three years from now. If the interest rate is 200%, what is the present value of the stream of payments you will receive?
 - a. \$1350
 - b. $(\$2700)/(2)^3$
 - c. $(\$2700)/(3)^3$
 - d. $(\$2700)/(2)^3 \100
 - e. none of the above

Questions 15 through 16 are based on the following information:

Consider two individuals, Phil and Oprah. Each is capable of producing figs and teas leaves. If Phil spends all of its time producing fig production, he can produce a maximum of 40 figs a day, leaving no time for tealeaf production. Or, if Phil spends all of its time on tealeaf production, he can produce 20 tealeaves, leaving no time for fig production. Oprah is capable of producing a maximum of 30 figs if she spends all her time on fig production. If she spends all her time producing tealeaves, she can produce 10 tealeaves a day, leaving no time for fig production.

Both Phil and Oprah are capable of producing any linear combination of these (for example Phil could choose to produce 38 figs and 1 tealeaf.) Also assume that Phil and Oprah can use their time only to produce these goods.

- 14. Who is the low cost producer of figs?
 - a. Phil, because he can produce the largest number of figs in a day
 - b. Oprah, because she can produce the largest number of figs in a day
 - c. Oprah, because she must sacrifice only one third (1/3) of a tealeaf to grow a fig
 - d. Phil, because he must sacrifice only two (2) tea leaves to grow a fig
 - e. None of the above
- 15. Who has the comparative advantage at producing tealeaves?
 - a. Phil, because he can produce the largest number of tealeaf
 - b. Oprah, because she can produce the least of them
 - c. Phil, because he must sacrifice only two (2) figs to make one tealeaf
 - d. Phil, because he is the low cost producer of tealeaf
 - e. Both c and d are correct
- 16. Researchers find that consuming oranges can <u>increase</u> the likelihood of cancer by 80%. What happens to the price and quantity (respectively) of oranges?
 - a. an increase: a decrease
 - **b.** an increase; an increase
 - c. a decrease; a decrease
 - d. uncertain; an increase
 - e. none of the above

Question 17 is based on the following: Consider a world in which there are just three goods: houses, peaches, and mopeds. Listed below are the prices and quantities of these goods produced in the base year and the current year.

	Base Year	Current Year
Houses		
Price	6	15
Quantity	300	400
Peaches		
Price	2	2
Quantity	400	600
Mopeds		
Price	4	8
Quantity	100	100

- 17. What is the current year price level?
 - a. 0.85
 - b. 1.00
 - c. 1.50
 - d. 2.00
 - e. 2.25