Teaching Portfolio

Sidonia McKenzie

Kansas State University

September 14, 2020

Contents

1.   Teaching Philosophy

1.1   Teaching Statement

<div style="text-align:right">Tell me and I forget, teach me and
I remember, involve me and I learn.</div>

<div style="text-align:right">Benjamin Franklin</div>

This statement by Benjamin Franklin embodies my instructional approach in the classroom. In the five sections that I have taught as an instructor of record, I employed pedagogical techniques that focus on active student engagement. The aim of these techniques is to help students connect economic concepts to what they observe in their everyday life and globally. Studies show that engaging students in the learning process can help improve student motivation, which leads to better long-term learning outcomes such as increased cognitive effort and improved critical thinking skills.[1]

As such, three techniques that I have found most successful in encouraging student engagement are: (i) think-pair-share group discussions; (ii) 'show-me-the-data' analysis and (iii) incorporating economic research or policy implications of various concepts. For instance, I ask students to download and plot several interest rates including the federal funds rate. We spend time discussing in small groups how these rates behave at different points of the business cycle and the possible implications they have on the students' future planning and decision-making. Students are usually surprised when they learn how changes in the federal funds rate affect them. This three-pronged approach forms the foundation of my teaching philosophy. I aim to create a stimulating and diverse learning environment where students feel confident and comfortable to participate in class activities. I believe that by using data-driven examples and policy discussions, students are exposed to economics as a tool that can be applied to help understand the world around them and simplify the decisions they will face in life, regardless of the career path they choose.

I further tailor the pedagogical approach and student engagement techniques based on the course being taught, the class level and cultural background. When I taught Principles of Macroeconomics, I utilized a practical approach to help students connect with the material. A common notion among first-year undergraduates is that economic concepts are too abstract and technical. To help change this mindset, I look for everyday examples and stories that would illustrate an economic principle. For example, I have used market data on the supply of and demand for the latest model of iPhones to illustrate the concept of disequilibrium. In higher level courses like Money and Banking and Intermediate Microeconomics, I use students' majors to

---

[1]See (Louis Deslauriers et al. "Measuring actual learning versus feeling of learning in response to being actively engaged in the classroom". In: *Proceedings of the National Academy of Sciences* 116.39 [2019], pp. 19251–19257) and (Douglas B. Markant et al. "Enhanced Memory as a Common Effect of Active Learning". In: *Mind, Brain, and Education* 10.3 [2016], pp. 142–152).

select news articles and empirical papers for class discussions at the beginning of the semester. I also incorporate other skills such as plotting and interpreting macroeconomic data in Excel, which would be useful to them after graduation.

Regardless of the class level, I place an emphasis on small group discussions to promote critical thinking and build community. In my experience, small group discussions not only help students to connect what they are learning to their own lives and to the world around them, but also foster an awareness and respect for differing viewpoints and experiences. As an international student instructor, I model embracing diversity of thought and experience by introducing examples from my home country into class discussions and using case studies from other countries with different policy regimes. As a result, students are more open to sharing their experiences and learning from each other. Embracing diversity and individuality is an important aspect of the learning process that I try to weave into different parts of each course. I believe that as an instructor, I have the responsibility to help students become more informed citizens, both economically and culturally.

I also try to cultivate a fun and interactive learning environment. In addition to using several interactive mediums such as Kahoot, I incorporate a 3-minute "Economists take on ..." segment, where I summarize an empirical research paper related to the lecture to demonstrate how economists are thinking about and solving real-world issues. Students are focused and intrigued during this portion of the lectures, especially when I talk about my personal research or that of my colleagues or faculty in the department. Introducing students to applied research provides them with additional exposure to economics and reinforces concepts such that they are able to continue the learning process on their own.

I am a firm believer in modeling the results I want to be achieved in the classroom. I make an effort to be open and approachable and take a keen interest in making students feel valued. To this end, I memorize all the names and hobbies of my students and emulate the common practice in our department of collectively addressing our students as economists. I make sure to adopt a flexible schedule to accommodate non-traditional, first-generation as well as part-time students. In addition, I keep track of and reach out to under-performing students to find ways to help them achieve their best. In my experience, having more flexible office hours to meet for one-on-one consultation has helped students improve their performance and set higher goals for themselves. I believe that students perceive my efforts to be genuine as I maintained an average score of 4.8/5 and 4.9/5 on teaching evaluations in the categories "Interest in helping students learn" and "Willingness to help outside of class," respectively. Adding to Benjamin Franklin's statement, I believe that involving students at every step of the learning process is central to developing life-long learners.

2. Teaching Experience

I have had the opportunity to be the instructor of record for four courses over six semesters. The courses include two upper level– ECON530: Money and Banking and ECON520: Intermediate Microeconomics– and two introductory level– ECON120: Principles of Microeconomics and ECON110: Principles of Macroeconomics. The class sizes range from 9 - 92 students and the instructional modality includes in-person and distance. I also served as a teaching assistant for graduate level Econometrics and Macroeconomic Theory and for undergraduate Principles of Transport and Urban Regional Economics. These positions have allowed me to develop an instructional approach that facilitates active student engagement and improve my ability to communicate effectively. In addition, my dual role as a student and teaching assistant gives me a unique perspective when developing course materials, which allows me to further connect with students. I place emphasis on a student-centered learning environment where students are encouraged to participate in, and take responsibility for their learning process.

In the subsequent section, I list my teaching history and present a summary of teaching evaluations in Table 3.1. Detailed reports of teaching effectiveness from Kansas State University as well as students' feedback for each semester are also provided.

2.1   Teaching history

Beginning with my current teaching assignment, my teaching history as a principal instructor is as follows[1]:

- ECON120: Principle of Microeconomics, Fall 2020 (online), 92 students

- ECON520: Intermediate Microeconomics, Summer 2020 (distance), 9 students

- ECON530: Money and Banking, Spring 2020 (blended), 27 students

- ECON530: Money and Banking, Fall 2019, 30 students

- ECON110: Principle of Macroeconomics, Spring 2019 (evening), 10 students

- ECON110: Principle of Macroeconomics, Fall 2018, 22 students

2.2   Teaching interests

I am a labor economist with strong interests in public policy and macroeconomics. This, coupled with my teaching experience, provides me with enough exposure to teach any undergraduate Economics course. However, I would be particularly interested in teaching Labor Economics, Macroeconomics, International/Financial Economics or a seminar/special topics course in Monetary Economics or Immigration policy.

---

[1]Teaching modality is face-to-face (day sessions) unless indicated otherwise.

2.3   Training and future goals

I am always looking for ways to improve my pedagogical and communication skills as I evolve as an instructor. I have participated in several teaching workshops held by the Graduate School on campus and a training course, "Effective Teaching Practices", from the American Council on Education Course in Effective Teaching Practices (ACUE). My near-term goals include learning new softwares and other tools such as Open Broadcaster Software (OBS) and building a light board, to improve my instruction and student engagement via the online/distance modality.

3. Evidence of Teaching Effectiveness

3.1 Summary of Teaching Evaluations

Overall teaching effectiveness at Kansas State University is assessed on a five-point Likert scale where 1 indicates "Very low" and 5 represents "Very High". I have maintained an average overall effectiveness score of 4.2/5 over my teaching history. It is worth mentioning that Fall 2019 was the first time teaching an upper level class. I actively sought students' feedback when I realized that the class activities did not align with their expectations. Specifically, students wanted to understand how to link the various economic concepts to the stock market. Learning from my experiences and making changes to the course lead to an increase in my teaching evaluation score from 3.4 in Fall 2019 to 4.4 in Spring 2020. My willingness to adapt my teaching strategies to meet students' need is another technique I employ to connect with and keep students engaged. More details are shown in the actual teaching evaluation report, which is provided at the end of section 3.3

Table 3.1: Measures and ratings of teaching effectiveness

	ECON110		ECON530		ECON520
	Fall 2018*	Spring 2019	Fall 2019	Spring 2020	Summer 2020
Teaching effectiveness					
Overall effectiveness as a teacher	4.2	4.5	3.4	4.4	4.4
Increased desire to learn about the subject	4.0	4.1	3.2	4.2	4.4
Amount learned in the course	3.8	4.1	3.3	4.2	4.1
Establishing a learning climate					
Made the course goals and objectives clear	4.1	4.5	4.1	4.1	4.6
Well prepared for class		4.5	3.7	4.4	4.7
Interest in helping students learn	4.7	4.8	4.6	4.9	4.6
Willingness to help outside of class	4.4	4.8	4.5	4.9	4.8
Facilitating student learning					
Explained subject clearly	3.8	4.3	3.4	4.1	4.3
Stimulated thinking about the subject	4.0	4.4	3.8	4.2	4.4
Grading procedures fair and equitable	4.3	4.8	4.1	4.9	4.9
Realized when students did not understand		4.4	3.6	4.3	4.3
Total responses	18	8	20	12	9
Total enrollment	22	10	30	27	9

Notes. *First Year Seminar (FYS) section. The teaching evaluation report for this section assesses other measures that are not listed in the standard evaluation. The statistics provided correspond to areas similar to those listed in the table.

3.2   Sample of students' feedback

This section shows a brief list of comments that students voluntarily provide on their evaluation sheets. Comments are organized by semester and written verbatim.

- **Fall 2018**

    - I thought Ms. McKenzie gave us all the tools to be successful in this class really wanted us to succeed.
    - She is awesome!
    - Good instructor. There's room to grow for all of us!
    - Very good instructor. She is really passionate for the work she does and that makes learning more exciting! Just the way the lessons are taught does not click with me due to the long power points with a lot of knowledge to absorb. More active lessons would be helpful.

- **Spring 2019**

    - Very enthusiastic and committed to her class. Great GTA!
    - A new ways for teaching. Helping the international students because the economy is different between countries.

- **Fall 2019**

    - She's a pretty good teacher and really wants students to learn, the subject matter itself is just pretty dull
    - What a great class! Our instructor was beyond dedicated to improving our understanding of the topic. Money and Banking was actually sort of interesting.
    - I felt like McKenzie was fair in her grading and did a very good job at teaching the subject. I will miss her as a teacher.
    - Professor McKenzie did a great job teaching this class given that she is still a graduate student. I enjoyed it and learned a lot.

- **Spring 2020**

    - Class was good. Teacher was great
    - I think you did a really great job teaching this course. The only thing I can think of is if the homework that was assigned before spring break could be in a Word Document format instead of a PDF so that we can edit the document, that would be great! Thank you so much for being a great teacher!!
    - I think Ms. McKenzie did a great job, especially considering the circumstances that arose this semester. She was very friendly and helpful to accommodate all her students. She always had fair grading procedures and expectations for us.
    - Sidonia is a wonderful teacher and she genuinely cares about students understanding the material. She will help any way she knows how!

- **Summer 2020**

  - Made this class enjoyable and always great explanations, thanks so much
  - Instructor Sidonia McKenzie was fun to have and always willing to help even if we had a lot of questions.
  - I do not enjoy economics, but I did in fact enjoy this class. I felt as if I have learned enough to advance me for the future! I am glad I signed up for this course!

3.3 Course evaluations

This section contains the course evaluations for the past four semesters when I taught as a principal instructor at Kansas State University. The most recent evaluations are shown first.

Faculty Member: **McKenzie, Sidonia**	Course Name: **Intermed Microecon(11683)**	Course #: **ECON 520**
Hr./Days: **Distance**	College: **Arts and Sciences**	Term: **Summer 2020**

Responses from 9 of the 9 enrolled (100%) Offered: 07/27/20 - 07/30/20

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	0	0	0	5	4	0	0.5	4.4
11. Increased desire to learn about the subject	0	0	1	3	5	0	0.7	4.4
14. Amount learned in the course	0	0	1	6	2	0	0.6	4.1

	Statistics		Comparative Status[2]	
	Raw	Adjusted[3]	Raw	Adjusted[3]
Averages and Comparative Status				
1. Overall effectiveness as a teacher	4.4	4.5	HM	HM
11. Increased desire to learn about the subject	4.4	4.6	HM	H
14. Amount learned in the course	4.1	4.2	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	0	1	4	2	2	0	1.0	3.6
13. Effort to learn in the course	0	0	2	5	2	0	0.7	4.0
Instructional Styles								
A. Establishing a Learning Climate								
2. Made the course goals and objectives clear	0	0	0	4	5	0	0.5	4.6
3. Well prepared for the course	0	0	0	3	6	0	0.5	4.7
5. Interest in helping students learn	0	0	0	4	5	0	0.5	4.6
10. Willingness to help students	0	0	0	2	7	0	0.4	4.8
B. Facilitating Student Learning								
4. Explained the subject clearly	0	0	0	6	3	0	0.5	4.3
6. Stimulated thinking about the subject	0	0	1	3	5	0	0.7	4.4
7. Made helpful comments on student work	0	0	0	2	7	0	0.4	4.8
8. Grading procedures fair and equitable	0	0	0	1	8	0	0.3	4.9
9. Realized when students did not understand	0	0	1	4	4	0	0.7	4.3

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

Faculty Member: **McKenzie, Sidonia**	Course Name: **Intermed Microecon(11683)**	Course #: **ECON 520**
Hr./Days: **Distance**	College: **Arts and Sciences**	Term: **Summer 2020**

Distance Courses

		1	2	3	4	5	OMIT	SD	AVG
1.1	Enthusiasm for teaching online.	0	0	0	3	6	0	0.5	4.7
1.2	Timely return of graded materials.	0	0	0	1	8	0	0.3	4.9
1.3	Ability to create an environment that is conducive to learning and sharing.	0	0	0	3	6	0	0.5	4.7
1.4	Effective use of technology to deliver course content.	0	0	0	1	8	0	0.3	4.9
1.5	Ease of navigating the course (course structure).	0	0	0	1	8	0	0.3	4.9
1.6	Ability to engage students in communication, discussion, and group interaction	0	0	1	2	6	0	0.7	4.6
1.7	Timely and useful response to your communications.	0	0	1	0	8	0	0.6	4.8

1 = Very Low | 2 = Low | 3 = Medium | 4 = High | 5 = Very High

		1	2	3	4	5	OMIT	SD	AVG
2.1	Your enthusiasm for online learning.	0	1	3	4	1	0	0.8	3.6
2.2	Your effort to prepare for this distance learning course (for example - making sure you met the minimum technology requirements, were able to sign in to your course and reviewed the syllabus).	0	1	0	5	3	0	0.9	4.1
2.3	Your effort toward involvement/participation in class discussion and group interaction.	0	0	2	4	3	0	0.7	4.1

1 = Very Low | 2 = Low | 3 = Medium | 4 = High | 5 = Very High

Additional Questions

1. Explain one concept you found most useful during the course.
   - marginalism
   - Seeing concepts I am familiar with from my other classes (pricing, firms, risk, etc.) through the lens of economics was incredibly useful. It helps me think about these topics from more than one angle. The two concepts I found most useful were indifference curves as well as different types of goods (inferior, complements).
   - The basic concepts are where I tend to struggle the most in every economics class. I felt as if re-learning these at the beginning set me up for success. I have learned the most in this econ class compared to any others just by really taking the time to learn the basics!
   - I struggled with learning elasticity in my Econ 120 course, and the way it was taught in this course really helped to clarify and solidify my knowledge of this concept.
   - Luxury goods and inferior goods.
   - I thought the unit on elasticity was very helpful to me. That was a topic I struggled with in my first micro class, but your lecture slides and practice problems helped me better understand the topic and how it works.
   - Understanding the change in average product of labor and capital.
   - Elasticity is the concept u found most useful because it allows me to think differently about the products that I buy at the store on whether or not they are really a necessity or just something I want.

2. List a few ways you think your online learning experience could have been better.
   - maybe a weekly zoom meeting, get to know teacher more
   - Double checking assignment and exam questions, the questions sometimes contradicted themselves. The questions said to solve for one thing and the abbreviations (ECON slang) said to solve for something else. On the last assignment about monopolies several of the questions were not covered in the lecture. Other than that, I really liked how the course was set up and enjoyed taking it.
   - As far as online courses go, this was one of the best structured I have ever taken. The expectations were clearly communicated and the feedback was prompt and effective. If I were to change anything about the class it would be to integrate some form of discussion of the topics, class discussion was minimal.
   - I was overall satisfied with the way I was taught and what I experienced. Overall, I felt valued as a student!
   - N/A
   - I think a little more online talking.
   - I think the course could be improved by adding some variance to the way lecture is presented, as well as maybe having some more interactive questions on the homework.
   - I don't have any critiques regarding this classes learning experience online. I felt that the instructor did a fantastic job at using the online format.
   - Budgeted more time into my schedule for the class. Pay more thorough attention to the due dates for assignments and exams.

Additional Comments

Faculty Member: **McKenzie, Sidonia**	Course Name: **Intermed Microecon(11683)**	Course #: **ECON 520**
Hr./Days: **Distance**	College: **Arts and Sciences**	Term: **Summer 2020**

1.	Additional Comments
	• made this class enjoyable and always great explanations, thanks so much
	• Instructor Sidonia McKenzie was fun to have and always willing to help even if we had a lot of questions.
	• I do not enjoy economics, but I did in fact enjoy this class. I felt as if I have learned enough to advance me for the future! I am glad I signed up for this course!

Teval

Teval Report: Student Ratings of Instruction
Teaching and Learning Center | Kansas State University

Faculty Member: **McKenzie, Sidonia**	Course Name: **Money And Banking(10897)**	Course #: **ECON 530**
Hr./Days: **930 MWF On Campus**	College: **Arts and Sciences**	Term: **Spring 2020**

Responses from 12 of the 27 enrolled (44%)   Offered: 05/04/20 - 05/11/20

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	0	0	1	5	6	0	0.6	4.4
11. Increased desire to learn about the subject	0	1	1	5	5	0	0.9	4.2
14. Amount learned in the course	0	2	1	2	7	0	1.1	4.2

	Statistics		Comparative Status[2]	
	Raw	Adjusted[3]	Raw	Adjusted[3]
Averages and Comparative Status				
1. Overall effectiveness as a teacher	4.4	4.5	HM	HM
11. Increased desire to learn about the subject	4.2	4.4	HM	HM
14. Amount learned in the course	4.2	4.3	HM	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	2	0	4	2	4	0	1.4	3.5
13. Effort to learn in the course	0	0	4	5	3	0	0.8	3.9
Instructional Styles								
A. Establishing a Learning Climate								
2. Made the course goals and objectives clear	0	0	3	5	4	0	0.8	4.1
3. Well prepared for class	0	0	2	3	7	0	0.8	4.4
5. Interest in helping students learn	0	0	0	1	11	0	0.3	4.9
10. Willingness to help outside of class	0	0	0	1	11	0	0.3	4.9
B. Facilitating Student Learning								
4. Explained the subject clearly	0	0	4	3	5	0	0.9	4.1
6. Stimulated thinking about the subject	0	2	0	4	6	0	1.1	4.2
7. Made helpful comments on student work	0	2	0	2	8	0	1.1	4.3
8. Grading procedures fair and equitable	0	0	0	1	11	0	0.3	4.9
9. Realized when students did not understand	0	0	2	5	5	0	0.7	4.3

Instructor's Description of Class

A. Type of class	Lecture
B. Class size	About right
C. Physical facilities	Satisfactory
D. Previously taught this course?	1
E. Approach significantly different this term?	Yes
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	Moderate; neither high nor low
K. Student effort to learn	Variable; sometimes high, sometimes low
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

Faculty Member: **McKenzie, Sidonia**		Course #: **ECON 530**
Hr./Days: **1030 MWF On Campus**	College: **Arts and Sciences**	Term: **Fall 2019**

Responses from 20 of the 30 enrolled (67%) 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	4	5	10	1	0	0.9	3.4
11. Increased desire to learn about the subject	2	2	8	6	2	0	1.1	3.2
14. Amount learned in the course	0	5	6	8	1	0	0.9	3.3

	Statistics				Comparative Status[2]	
	Raw		Adjusted[3]		Raw	Adjusted[3]
Averages and Comparative Status						
1. Overall effectiveness as a teacher	3.4		3.4		LM	LM
11. Increased desire to learn about the subject	3.2		3.2		LM	LM
14. Amount learned in the course	3.3		3.4		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	1	3	8	6	2	0	1.0	3.3
13. Effort to learn in the course	1	2	7	9	1	0	0.9	3.4
Instructional Styles								
A. Establishing a Learning Climate								
2. Made the course goals and objectives clear	0	1	3	9	7	0	0.8	4.1
3. Well prepared for class	0	2	4	12	2	0	0.8	3.7
5. Interest in helping students learn	0	0	1	7	12	0	0.6	4.6
10. Willingness to help outside of class	0	0	3	5	12	0	0.7	4.5
B. Facilitating Student Learning								
4. Explained the subject clearly	0	3	9	6	2	0	0.9	3.4
6. Stimulated thinking about the subject	0	2	5	8	5	0	0.9	3.8
7. Made helpful comments on student work	0	3	5	7	5	0	1.0	3.7
8. Grading procedures fair and equitable	1	1	3	6	9	0	1.1	4.1
9. Realized when students did not understand	0	4	4	8	4	0	1.0	3.6

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

Teval Report: Student Ratings of Instruction

Teaching and Learning Center | Kansas State University

Faculty Member: **McKenzie, Sidonia**	Course #: **ECON 110**
Hr./Days: **530 MW On Campus** College: **Arts and Sciences**	Term: **Spring 2019**

Responses from 8 of the 10 enrolled (80%)   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	4	4	0	0.5	4.5
11. Increased desire to learn about the subject	0	0	3	1	4	0	0.9	4.1
14. Amount learned in the course	0	0	2	3	3	0	0.8	4.1

	Statistics		Comparative Status[2]	
	Raw	Adjusted[3]	Raw	Adjusted[3]
Averages and Comparative Status				
1. Overall effectiveness as a teacher	4.5	4.7	HM	H
11. Increased desire to learn about the subject	4.1	4.5	HM	H
14. Amount learned in the course	4.1	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	0	5	2	0	0	0.9	3.0
13. Effort to learn in the course	0	0	2	4	2	0	0.7	4.0
Instructional Styles								
A. Establishing a Learning Climate								
2. Made the course goals and objectives clear	0	0	0	4	4	0	0.5	4.5
3. Well prepared for class	0	0	0	4	4	0	0.5	4.5
5. Interest in helping students learn	0	0	0	2	6	0	0.4	4.8
10. Willingness to help outside of class	0	0	0	2	6	0	0.4	4.8
B. Facilitating Student Learning								
4. Explained the subject clearly	0	0	1	4	3	0	0.7	4.3
6. Stimulated thinking about the subject	0	0	1	3	4	0	0.7	4.4
7. Made helpful comments on student work	0	0	1	5	2	0	0.6	4.1
8. Grading procedures fair and equitable	0	0	0	2	6	0	0.4	4.8
9. Realized when students did not understand	0	0	1	3	4	0	0.7	4.4

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

4. Sample course materials

In this section, I provide a sample of instructional materials used during the Fall 2018 and Spring 2020 semesters. They correspond to ECON110 and ECON530, respectively.

Fall 2018

ECON110: Principles of Macroeconomics

First Year Seminar | Section H

Instructor Information
Instructor: Sidonia McKenzie
Office: Leasure 009 B
Email: sidoniam@ksu.edu
Office hours: TBA

Course Information
Lecture times: MWF, 11:30am – 12:20pm
Lecture room: KG209
Prerequisite: MATH010 – Intermediate Algebra

Course Description

A Warm WILLIE WILDCAT Welcome To You!

Thank you for enrolling in this fun and interactive foundation level macroeconomics course!

In this course we will explore basic principles, facts, and problems of economics.
We will begin with the ten principles of economics, which will give you an overview of what economics is about by exploring key topics such as gains from trade, supply and demand and price controls. We will then delve further into macroeconomic theory, which will be covered in four sections. Section 1 explores the data of macroeconomics such as GDP, determination of price level and inflation. Section 2 is about the real economy in the long-run while Section 3 outlines money and prices in the long-run. We will spend the reminder of the course studying short-run economic fluctuations. Section 4, which links the concepts from Sections 2 and 3 together, is about aggregate demand and supply, the influence of monetary and fiscal policy on aggregate demand and the short-run trade off between inflation and unemployment. This course will enable students to develop an appreciation of economics as a way of thinking and approaching real-world problems.

Main Textbook: Mankiw, N.G., *Principles of Macroeconomics*, 8th Edition, Cengage Learning, 2017.

First-Year Seminar Program

The purpose of the First-Year Seminar (FYS) program is to help students make the transition to university courses and college-level learning. In this effort, the FYS's focus is on the intellectual skills that students need to flourish at the University. The FYS courses provide support for the transition into college life and the K-State community. ECON110 is a highly interactive course. Students are encouraged to participate in class activities, ask questions about the University and practice the skills needed to succeed as a first-year student.

Course Objectives

Upon successful completion of the ECON110 FYS, students should be able to:

- *Think critically and apply learning*: Use the skills and knowledge learned in the class to solve new problems, and to assess the implications and/or significance of personal decisions, global events, and government policy;
- *Communicate effectively*: Express their understanding of course content in respectful dialogue with others; and
- *Build community*: Interact effectively with faculty and peers to develop a deeper understanding of the course material and to help others learn.

Class Assessments

- *Attendance*: In addition to reading ahead of class, I expect good attendance and active participation and engagement in class activities. You are at the center of all class activities and discussions and so your attendance is highly important to learning the information presented in class. For this reason, attendance rolls will be taken at every class and will count towards your course grade. To earn full points, students must attend every class and be engaged in the day's topic. I understand that some students are more reserved than others and may not make comments or ask a lot of questions during a given class. However, it should be obvious that students are on task and attuned to class discussions. Three points may be earned in each class for attendance (1 point) and participation (2 points) such that **a total of 45 class points may be earned for attendance and participation over the 15-week class period.**

- *Homework assignments*: To encourage further learning of class topics, homework assignments will be given regularly. You will be given at least one week to work on each assignment. **You are strongly encouraged to form small study groups to discuss assignments. However, everyone is responsible for completing and turning in their own assignment. Assignments contribute a total of 90 points to your overall grade in this course.**

- *Exams:* The assessment for this class consists of three midterm exams and a comprehensive final exam (see Table 1 below for exam schedule). **Each midterm exam is worth 110 points and will be during class hours. The comprehensive final exam is worth 150 points**.

- *Presentations*: It is important to emphasize that our class environment is student-centered and highly interactive. To encourage this, students will be given the opportunity to give a **2-minute presentation/commentary** on a given class topic or a trending global macroeconomic issue. This component **contributes a total of 15 points towards your final grade**. Further details will be announced in class.

- *Co-curricular activities*: There will be five co-curricular activities for the semester. They will include but are not limited to: three midterm study sessions, a guest lecture series, and a recreational activity. Further details will be announced in class. I understand that occasionally circumstances may make it impossible for you to attend class. As such, **three of these events can be used towards your class attendance points, if you missed class, and will earn you a maximum of 9 points** (3 points for each event). This means that you can only miss a maximum of three classes.

Grading

- Grades are based on attendance (45 points), homework assignments (90 points), three midterm exams (110 points each), a comprehensive final exam (150 points) and class presentations (15 points). Therefore, **the maximum points for overall course assessment is 630 points.** Letter grades are based on a curve. Normally, 90% and above correspond to an "A" however, this cutoff point will not increase and may even fall after a curve is applied.

- If for **valid** reasons you are absent for an exam, this can be made up by carrying the weight forward from the missed exam to the next exam. *Invalid absences from exams will result in zero points!*

Table 1: Summary of ECON110 FYS Assessment for Fall 2018

Assessment	Total points	Tentative date
Attendance	45	
Homework assignment	90	
Midterm 1	110	Sept. 21, 2018
Midterm 2	110	Oct. 15, 2018
Midterm 3	110	Nov. 16, 2018
Final Exam	**150**	**Dec. 12, 2018 7:30-9:20 am**
Presentations	15	
Overall course points	**630**	

Note: Midterm dates may change based on our progress in the class.

Lecture Topics

➕ Below is a tentative schedule for the lectures. Any changes to the plan will be announced in class and you are responsible for updating the information.

Table 2: Weekly Lecture Topics for Fall 2018

Macroeconomic Topics	Chapter
Introduction and Key Principles	
Ten Principles of Economics	1
Thinking like an Economist	2
Gains from Trade	3, 9
Market force of Supply and Demand	4, 6
The data of Macroeconomics	
Measuring a Nation's Income	10
Measuring the Cost of Living	11
Real Economy in the Long-run	
Unemployment	15
Money and Prices in the Long-run	
The Monetary System	16
Money Growth and Inflation	17
Short-run Economic Fluctuations	
Aggregate Demand and Aggregate Supply	20
Monetary and Fiscal Policy on Aggregate Demand	21
Short-run Trade-off between Inflation and Unemployment	22

Other important information

➕ In addition to forming study groups to discuss assignments and lecture notes, you are strongly encouraged to make use of my office hours. I am also available by appointment and right after class.

➕ *Class web page*: online.ksu.edu
> Various class materials such as lecture notes, homework assignments and class discussion topics will be available on the class web page. **It is important that you check the class webpage regularly**.

➕ *Tutoring*: The Department of Economics provides weekly tutoring sessions. Please check our website for further details on this. Other tutoring sessions are offered through the Academic Achievement Center. Please visit http://www.k-state.edu/aac/tutoring/ for more details.

➕ **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 it is stated or not: "**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.

➕ **Information for 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 Salina campus, contact the Academic and Career Advising Center at acac@k-state.edu, 785-826-2649.

➕ **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.

ECON110: Principles of Macroeconomics
Assignment 1

Due: Monday, September 10, 2018

Instructions:

This assignment covers the first three lectures that we've covered so far in class, i.e. Lectures Notes 1-3. **Please answer all questions using full sentences and in paragraph form where necessary. Write all solutions legibly**. **Assignments will be collected at the beginning of class on Monday, September 10**. If you work together, please ensure that you write up your own assignments uniquely. **No two assignments should be alike!**

1. For campus move-in day, you decided to hire someone to help you move. Your parents asked: wouldn't it be cheaper to just move yourself, **yes or no**? Explain your answer to your parents using the concept of opportunity cost.

2. Using **at least three** of the 10 principles of economics, explain why Kansas specializes in agricultural production.

3. How does your decision to invest in a college degree add to your human capital stock (i.e. knowledge and skills)? Show this on your projected production possibilities frontier for ten years from now compared to your production possibilities curve without a college degree. HINT: Place human capital stock on the *y-axis* and consumption level on the *x-axis*.

4. Principle 4 states that: "*People respond to incentives*".

   Watch this short clip from Office Space: http://dirkmateer.com/media/Film+Clips/office-space. In one short paragraph describe a set of incentives that would get employees to work hard without producing unintended consequences like Peter.

5. Determine which of the following is a microeconomic or macroeconomic issue?
   a. The national savings rate is less than 4% of disposable income.
   b. Jim was laid off from his last job and he is currently unemployed.
   c. The Social Security program.
   d. A family must decide how much to invest in a college education savings plan.
   e. The government passes legislation designed to stabilize the economy during a recession.

6. Using the following production table, answer the questions below:

Who should wash the cars, Kim or Kanye? Why?

Kim		Kanye	
Car washes	**Lawns mowed**	**Car washes**	**Lawns mowed**
0	8	0	4
3	6	2	3
6	4	4	2
9	2	6	1
12	0	8	0

7. The table below shows the maximum number of burgers or hot dogs that Dallas and Cody can cook in 1 hour.

a. Fill in the rest of the table with the opportunity cost of burgers and hot dogs for each person. Be sure to include the units.

	Maximum Burgers	Maximum Hot Dogs	Opportunity Cost of 1 Burger	Opportunity Cost of 1 Hot Dog
Dallas	30	60		
Cody	50	75		

b. Identify who has a comparative advantage in producing each good.

c. If Cody has an absolute advantage in making hot dogs and burgers should he do all the cooking himself? If your answer is no, what should Dallas and Cody specialize in cooking?

8. **Muddy or clear?**
   You have been exposed to several concepts in economics so far. The concepts were mostly intuitive and required you to examine the world around you through the lens of an economist.

   a. Briefly describe two concepts that were particularly **clear and useful** to you and how you have applied them to your daily life.

   b. Briefly describe two concepts that are still **muddy (unclear)** and you have no idea how they can be applied to your life or the world around you.

ECON110: Principles of Macroeconomics
Fall 2018
Final Exam
December 12, 2018
7:30 – 9:20am

Name: _____

<u>**Instructions:**</u>
Please answer ALL 43 questions. The total score for this exam is 150 points. There are two sections in this exam: **Section 1, which contains 40 multiple choice questions (MCQs) and Section 2, which has THREE (3) short answer questions. Section 1 has two subsections: A and B. The questions in Section 1A are worth 2 points each while questions in section 1B are worth 1 point each.** For the MCQs, bubble in the correct answer on the scantrons provided. **For short answer questions, please write legibly** in the space provided or on the back of the paper if you wish and **justify your responses as best as possible. Remember to show your calculations.**

GOOD LUCK! You got this! ☺

<u>**SECTION 1:**</u> **Multiple Choice Questions (Total points: 75)**
<u>**Sub-section 1A:**</u> **Each question is worth 2 points.**

1. **Which statement is consistent with the law of demand?**
    a. A reduction in market price will lead to a decrease in quantity demanded.
    b. At a zero price, quantity demanded will be equal to zero.
    c. A reduction in market price will lead to an increase in quantity demanded.
    d. An increase in market price will lead to an increase in quantity demanded.

2. **A difficult aspect of measuring the unemployment rate is**
    a. each state uses a different process
    b. the survey response rate is so low.
    c. determining who is eligible and available to work.
    d. making sure all adults are included.

3. **How is a market demand curve derived from individual demand curves?**
    a. Calculate the average quantity demanded among all consumers.
    b. Add up quantities demanded by all individual consumers for each price.
    c. Use the largest quantity demanded among all consumers for each price.
    d. Add up prices paid for each unit demanded by individuals.

4. **If real GDP equals nominal GDP, then**
   a. output did not grow.
   b. there was no inflation.
   c. the current year is the base year.
   d. the growth in output was equal to the growth in the price level.

5. **Suppose Alice divides her time between growing apples and raising sheep. If she discovers a new farming technique than increases the number of apples she can produce each year, then her opportunity cost of raising sheep:**
   a. will fall.
   b. will rise.
   c. will not be affected.
   d. will be zero.

Consider the table below. It contains the latest labor force statistics for the U.S. as at September 2018. Use the data to answer questions 6.

Adult population of the U.S. by group, September 2018	
# of employed	155,962 million
# of unemployed	5,964 million
Not in the labor force	96,364 million

6. **What was the unemployment rate in September 2018?**
   a. 3.68%
   b. 3.7
   c. 2.31%
   d. 2.3

7. **Suppose that in the market for computer memory chips, the equilibrium price is $50 per chip. If the current price is $55 per chip, then there will be _____ of memory chips.**
   a. a surplus
   b. a shortage
   c. an equilibrium quantity

8. **To increase the money supply, the Federal Reserve could**
   a. Increase the discount rate
   b. Increase the required reserve ratio
   c. Sell U.S. Treasury securities
   d. Buy U.S. Treasury securities

9. **A company sells 100 boxes of chocolate, yet it only produced 90 boxes of chocolate during the year. Which of the following is true?**
   a. It is impossible to sell more than is produced.
   b. Inventory investment must be negative.
   c. The price of the chocolate must have increased
   d. Inventory investment must be positive.

10. **Recall the formula that states that $V = 1/P$, where V is the value of the dollar and P is the price level. If the price level increases from 0.5 to 1, what will happen to the value of the dollar?**
    a. It will fall by $1
    b. It will rise by $1
    c. It will remain unchanged
    d. It will rise by $2
    e. It will fall by $2

11. **Quantitative easing is the:**
    a. Gradual release of money into the money supply through open market operations (OMOs)
    b. Targeted use of OMOs in which the central bank targets certain markets
    c. Strategy of increasing the money supply by buying U.S. Treasury securities on the open market.
    d. Slow injection of money into the economy by the Federal Reserve

12. **If nominal wages, W= $25/hr and the price level of goods and services, P=$5/unit of output then what is the real wage?**
    a. $\dfrac{W}{P} = \dfrac{\$25/hr}{\$5/unit} = 5$ *units hr per output*
    b. $\dfrac{W}{P} = \dfrac{\$25/hr}{\$5/unit} = 5$ *units output per hr*
    c. $\dfrac{P}{W} = \dfrac{\$5/hr}{\$25/unit} = 1/5$ *units hr per output*
    d. $\dfrac{P}{W} = \dfrac{\$5/hr}{\$25/unit} = 1/5$ *units output per hr*

13. **Which of the following statement is TRUE about the monetary neutrality**
    e. Monetary neutrality is the proposition that monetary developments affect nominal variables and not real variables.
    f. Monetary neutrality is the proposition that monetary developments affect real variables and not nominal variables.
    g. Monetary neutrality is the proposition that monetary developments affect nominal variables and real variables equally.

14. **The federal funds rate is the**
    a. Interest on deposits that private banks hold on reserve at the Federal Reserve
    b. Interest rate on loans between commercial banks
    c. Interest for loans from the federal Reserve to commercial banks
    d. Income generated by the Federal Reserve through discount loans

15. **If you withdraw $4,500 from your checking account and the required ratio is 20%, then the bank's:**
    a. Total deposit will increase by $4,500
    b. Total deposit fall by $4,500
    c. Total deposit will remain unchanged

16. **Derek decides to pursue a career in economics and end up working as a Chief Economist for the Bureau of Labor Statistics. As his employees, help him decide which transactions affect the GDP deflator.**
    a. Dunkin' Donuts raises the price of their donuts, Gucci increases the price of its handbags it sells to the US, Dell increases the price of their PCs
    b. Unemployment checks paid out by the government, Bill Gates' $20 million donation to the St. Jude's Hospital for Children, the purchase of a new house
    c. T-mobile reduces the cost of its cellphones services, John Deere changes the prices of its tractors, homeowners association decides to change the cost of rent in Manhattan
    d. Conservationists revalues the cost of the rainforests to $7 billion, Cody plays for his friends on weekends, K-State increases its tuition fees by 10%.

17. **A reduction in interest rate at each price level causes:**
    a. the aggregate demand curve to shift to the left
    b. a movement along the aggregate demand curve
    c. a fall in equilibrium price
    d. the aggregate supply curve to shift to the left
    e. the aggregate demand curve to shift to the right

18. **A bank has excess reserves of $400,000 and makes a new loan for $50,000. If the bank faces a 25% required reserve ration, by how much will the money supply increase when the loan is made?**
    a. $0
    b. $200,000
    c. $50,000
    d. $350,000

19. **One of the problems in measuring inflation over time is that**
    a. prices tend to fall from year to year.
    b. prices tend to rise each year.
    c. prices are always the same each year.
    d. changes in consumption patterns and innovations make comparisons across years problematic.

20. **What are the three basic functions of money?**
    a. Medium of exchange, unit of account, and store of value
    b. Account of exchange, medium of account, and store of value
    c. Medium of exchange, record of account, and assessment of value
    d. Medium of exchange, store of account, and unit of value

21. **What happens NOW if there is the general expectation of coming rapid inflation?**
    a. AS will increase (now)
    b. AD will increase (later)
    c. AD will decrease (now)
    d. AD will increase (now)

Use the following information to answer question 22. Assume that the following asset values (in millions of dollars) exist in Econonation:

Category	Value ($)
Federal Reserve notes in circulation	700
Money market mutual funds (MMMFs) held by individuals	400
Corporate bonds	300
Currency in commercial banks	120
Savings deposits, including money market deposit accounts (MMDAs)	140
Checkable deposits	1,700
Small-denominated (less than $100,000) time deposits	100
Coins in circulation	40

22. **What is the value of M2 in Econonation?**
    a. $3,080 million.
    b. $2,440 million.
    c. $2,400 million
    d. $5,000 million

23. When an unemployed worker receives a payment from the government as a result of being unemployed, it is
   a. included in the consumption category of GDP
   b. included in the investment category of GDP
   c. included in the government purchases category of GDP
   d. included in the net exports category of GDP
   e. not included in any of the expenditure categories of GDP

24. Which of the following is a final good or service?
   a. fertilizer purchased by a farm supplier
   b. a haircut purchased by a father for his 12-year-old son
   c. diesel fuel bought for a delivery truck
   d. Chevrolet windows purchased by a General Motors assembly plant

25. An increase in your nominal income and a decrease in your real income might occur at the same time if your
   a. real income increases more than the cost of living increases.
   b. nominal income increases less than the cost of living increases.
   c. nominal income increases more than the cost of living increases.
   d. real income increases at the same rate as the cost of living increases.

26. If a point lies below the production possibilities curve, it is said to be:
   a. Efficient
   b. Inefficient
   c. Not possible

27. When people in the United States buy clothing made in China, this counts as:
   a. Consumption
   b. Imports
   c. Investment
   d. Consumption and exports
   e. Consumption and imports

28. What function of money is highlighted when Drew buys flowers for his girlfriend for their eight-day anniversary?
   a. Fiat money
   b. Store of value
   c. Commodity money
   d. Unit of account
   e. Medium of exchange

29. If there is an increase in the nation's money supply, the interest rate will:
  a. fall, investment spending will rise, aggregate demand will shift right, real GDP will rise, and the price level will fall.
  b. rise, investment spending will fall, aggregate demand will shift right, real GDP will rise, and the price level will fall.
  c. fall, investment spending will rise, aggregate demand will shift right, and real GDP and the price level will rise.
  d. rise, investment spending will fall, aggregate demand will shift right, real GDP will fall, and the price level will rise.

30. If the government were to print more money, which of the following would occur?
  a. There would be no change in M1 or M2.
  b. M1 would decrease; M2 would increase
  c. Both M1 and M2 would increase
  d. Both M1 and M2 would decrease

31. The wealth, interest rate and exchange rate effects all explain why the:
  a. Aggregate supply curve has an upward slope
  b. Aggregate demand curve has an downward slope
  c. Aggregate supply curve has an downward slope
  d. Aggregate demand curve has an upward slope

32. You deposit $2000 in Citibank for one year. The tax rate is 35%. In year 0: inflation = 0% and nominal interest rate = 14%. In year 1: inflation = 14%, nominal interest rate = 28%. What is after-tax nominal interest rate in year 1?
  a. 9.1%
  b. 35%
  c. 65%
  d. 18.2%

33. Suppose the number of people who retire is greater than the number of people who enter the workforce and find jobs. All else the same, the labor force participation rate will _____ and the unemployment rate will _____.
  a. decrease; increase
  b. decrease; decrease
  c. increase; increase
  d. decrease; not change
  e. increase; decrease

34. All of the following are tools available to the Fed for controlling the money supply *except*
 a. The reserve requirement
 b. The discount rate
 c. Open market operations
 d. Taxes

For question 35, please refer to the figure below, which shows the demand and supply of coffee
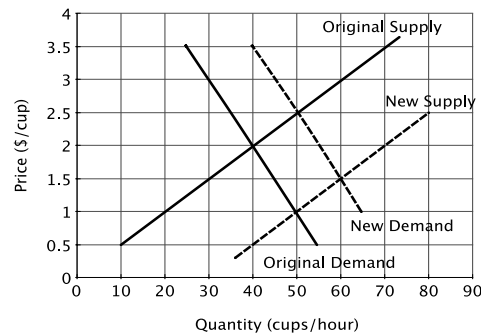
35. What might cause a shift from the original demand curve to the new demand curve?
 a. An expectation that coffee prices will fall in the future.
 b. An increase in the price of tea (a substitute for coffee).
 c. A decrease in income (assuming coffee is a normal good)
 d. More than one of the above is correct.

Sub-section 1B: Each question is worth 1 point.
For the following questions, please answer True or False.

36. Tim is a recent graduate of Kansas State University and is currently looking for a job. This is an example of frictional unemployment.
 a. True
 b. False

37. The nominal interest rate plus the inflation rate is the real interest rate
 a. True
 b. False

38. When the price level decreases, restaurants become busier as more people purchase restaurant meals. This illustrates the interest rate effect.
 a. True
 b. False

39. **The purchase of existing U.S. Treasury securities by the Federal Reserve will increase the money supply.**
    a. True
    b. False

40. **Surprise inflation redistributes wealth from borrowers to lenders**
    a. True
    b. False

SECTION 2: Short Answer Questions (Total points: 75)

41. **Marylucy and Lauren are joint owners of ΘΣΘ Sorority Bakery Ltd. They make bread and muffins. In an hour, Marylucy can either make 10 loaves of bread or 40 muffins, while Lauren can either make 12 loaves of bread or 60 muffins. Assuming that they work for 8 hours in a day, answer the following questions.**
    a. Draw Marylucy's daily production possibility curve (PPC), placing muffins on x-axis and bread on the y-axis. Label the x-intercept, the y-intercept and the slope of the PPC. Be sure to also label your axes. **(7 pts)**
    b. What is the opportunity cost of one loaf of bread for Marylucy and Lauren? **(3 pts)**
    c. Draw a demand and supply diagram to illustrate the likely effect on muffins and bread if the price of eggs increase. **(5 pts)**
    d. List three factors that shift ΘΣΘ Sorority Bakery Ltd's supply curve. **(3 pts)**
    e. Marylucy and Lauren uses money as a medium of exchange for their baked goods and services in the economy. Explain in two sentences the consequences of an economy relying on fiat money. **(4 pts)**
    f. Marylucy has an interest in economic affairs. She read in the news that the unemployment rate is considered an imperfect measure of joblessness. In two sentences explain to her whether you agree or disagree with this statement. **(3 points)**

Suppose that the aggregate demand and aggregate supply schedules for a hypothetical economy are as shown in the following table:

Amount of Real GDP Demanded, Billions	Price Level (Price Index)	Amount of Real GDP Supplied, Billions
$100	300	$450
200	250	400
300	200	300
400	150	200
500	100	100

42. Use the data above to graph the aggregate demand and aggregate supply curves. Illustrate the equilibrium price and output level. **(7 pts)**
    a. If the price level is 250, will quantity demanded equal, exceed, or fall short of quantity supplied? By how much? **(2 pts)**
    b. Suppose that buyers desire to purchase $200 billion of extra real output at each price level. What are the new equilibrium price level and level of real output? **(3 pts)**
    c. In business cycle terminology, what would economists call this change from the initial equilibrium output level to the new equilibrium output level in part b? **(2 pts)**
    d. What effects (increase, decrease or remain unchanged) would each of the following have on aggregate demand, other things equal?

  i. A 10 percent across-the-board reduction in personal income tax rates. **(2 pts)**
  ii. The general expectation of coming rapid inflation. **(1 pt)**
  iii. The complete disintegration of OPEC, causing oil prices to fall by one-half. **(2 pts)**
  iv. An increase in imports that exceeds an increase in exports. **(1 pt)**

 e. What is the difference between a movement along the demand curve and a shift of the demand curve? Explain in terms of what causes a movement and what causes a shift. **(5 pts)**

43. Read and answer the following statements clearly. Remember to use the key terms associated with each concept.

 a. How does the focus of macroeconomics differ from that of microeconomics when it comes to income, output, employment and prices? **(5 pts)**

 b. Describe three different reasons to explain why it might be useful to calculate GDP. **(5 pts)**

 c. The consumer price index (CPI) and the gross domestic product (GDP) deflator are both measures of inflation. Explain the difference between them. **(5 pts)**

Consider the following table to answer the next question:

Group	# in Millions
Relevant population	???
Labor force	179
Not in labor force	95
Employed	???
Unemployed	18

 d. What is the labor force participation rate in this economy? **(10 points)**

ECON530: Money and Banking

Section B

Fall 2019

August 26 – December 13 (15 weeks)

A Warm WILLIE WILDCAT Welcome to You!

Instructor Information
Instructor: Sidonia McKenzie
Office: Leasure 009 B
Email: sidoniam@ksu.edu
Office hours: Mon. & Wed. 11:45-12:45am

Course Information
Lecture times: MWF; 10:30am – 11:20am
Lecture room: Waters Hall 348
Prerequisite: ECON110 – Principles of Macroeconomics

Thank you for enrolling in this course!

In this course we will explore basic principles, facts, and challenges of money, banking and financial markets. It is designed to help you obtain a better understanding of how financial markets and financial institutions work and the role of money in an economy. Considering the recent financial crisis, and its aftermath and ongoing global trade tensions, it is certainly an exciting time to be studying money and banking. We will use these recent economic events to enrich the study of money, banking and financial markets and emphasize their importance in maintaining the wellbeing of our economy.

Main Textbook: Mishkin, F, *The Economics of Money, Banking and Financial Markets*, 12th Edition, Pearson, 2019. **ISBN 13:** 978-0-13-473382-1

Course Objectives

Upon successful completion of the ECON530, students should be able to:

- *Think critically and apply learning*: Use the skills and knowledge learned in the class to solve new problems, and to assess the implications and/or significance of personal decisions, global events, and government policy;
- *Communicate effectively*: Express their understanding of course content in respectful dialogue with others; and
- *Build community*: Interact effectively with faculty and peers to develop a deeper understanding of the course material and to help others learn.

Expectations

- **<u>Professional conduct is always expected</u>**. I expect that you will arrive to class on time and be respectful towards each other. We all come from various backgrounds and bring differing viewpoints and experiences to the table, which means that we have so much to learn from each other. We can show respect for differences by seeking to understand, asking questions, clarifying our understanding, and/or respectfully explaining our own perspectives. This way, everyone walks away with a new perspective of seeing an issue and respecting others with different values or beliefs. *Cell phones and electronic devices should be turned off during class.*

- 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.*

Class Assessments

- *Attendance*: In addition to reading ahead of class, I expect good attendance and active participation and engagement in class activities. You are at the center of all class activities and discussions and so your attendance is highly important to learning the information presented in class. For this reason, attendance rolls will be taken at every class and will count towards your course grade. To earn full points, students must attend every class and be engaged in the lecture. I understand that some students are more reserved than others and may not make comments or ask a lot of questions during a given class. However, it should be obvious that students are on task and attuned to class discussions. Two points may be earned in each class for attendance (1 point) and participation (1 point) such that **<u>86 class points may be earned for attendance and participation over the 15-week class period[1].</u>**

- *Homework assignments*: To encourage further learning of class topics, homework assignments will be given regularly. You will be given at least one week to work on each assignment. *You*

---

[1] This is equivalent to 43 sessions for the semester, which excludes the first day of class, August 26th, and Labor Day, September 2nd.

are strongly encouraged to form small study groups to discuss assignments. However, everyone is responsible for completing and turning in your own assignment. **There are four (4) assignments in total, which contribute 120 points (30 points each) to your overall grade in this course.**

➕ *Exams:* The assessment for this class consists of **two midterm exams and a comprehensive final exam** (see Table 1 for exam schedule). **Each midterm exam is worth 200 points and will be during class. The comprehensive final exam is worth 230 points**.

➕ *Quizzes:* **Two quizzes will be given during the week of midterms 1 and 2**. They are worth **50 points each** and is **designed to help you prepare for the up-coming midterms**. For example, Midterm 1 is on Friday, September 27th, so **quiz 1 will be given on Monday, September 23rd**. I will return and discuss your quizzes on Wednesday, September 23rd. The same pattern is followed for **quiz 2 (Midterm 2 is on November 1st)**.

➕ *Group presentation:* It is important to emphasize that our class environment is student-centered and highly interactive. To encourage this, students will be given the opportunity to give a **5-minute presentation/commentary** on a given class topic. This component **contributes a total of 50 points towards your final grade**. Further details and grading rubric will be provided in class.

➕ *Reflective essay:* On the last day of class, December 13th, you will be asked to write an essay on: i) the most useful/applicable concept(s) you've learnt in the class and why; ii) the topic(s) you've found least useful or most difficult to grasp and why; iii) your level of effort throughout the course; iv) general comments on how you think the course could be improved and iv) your recommendations to the next cohort of ECON530 students. **This reflective piece is worth 14 points**.

➕ *Pop quiz:* This quiz is a random "just-for-fun" quiz to help you engage with the syllabus on the first day of class. **It is worth 2 points**. You can think of it as a "**Welcome to ECON530**" **bonus points!**

Grading

➕ Grades are based on attendance (86 points), homework assignments (120 points), two midterm exams (200 points each), a comprehensive final exam (230 points), quizzes (50 points each), group presentation (50 points) and reflective piece (14 points). The 2 points from the pop quiz are bonus points! Therefore, **the maximum points for overall course assessment is 1002 out of 1000 points.** I follow the University's grading scale where 90% and above = A; 80% - 89.9% = B; 70% - 79.9% = C; 60% - 69.9% = D; below 60% = Fail.

➕ If for **valid** reasons you are absent for an exam, **please notify me before 9am on the day of the exam to arrange a make-up**. I am always willing to accommodate you, but *I will NOT grant make-ups to anyone who contacts me after this time.*

Other important information

- In addition to forming study groups to discuss assignments and lecture notes, you are strongly encouraged to make use of my office hours. I am also available by appointment and right after class.

- *Class web page*: Various class materials such as lecture notes, homework assignments and class discussion topics and announcements will be available on the class web page. **It is important that you check the class webpage regularly.**

- *Tutoring*: The Department of Economics provides weekly tutoring sessions. Please visit our website for further details. Other on campus tutoring sessions are offered through the Academic Achievement Center. Please visit http://www.k-state.edu/aac/tutoring/ for more details.

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 it is stated or not: "**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.

- **Information for 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 Salina campus, contact the Academic and Career Advising Center at acac@k-state.edu, 785-826-2649.

Lecture Topics

➕ Below is a tentative schedule for the lecture topics, assignments and exams. Any changes to the schedule will be announced in class and you are responsible for updating the information.

Week	Topics	Assignments
Week 1	Guest lecturer	
	Syllabus Review; Getting-to-know you; Intro to fundamental concepts	
	Chapter 1: Why study Money, Banking and Financial system	
Week 2	Chapter 2: An overview of the Financial System	
Week 3	Chapter 3: What is Money? Chapter 4: The meaning of interest rates	
Week 4	Chapter 5: The behavior of interest rates	*HW#1* Due: September 16th (30 points)
Week 5	Chapter 6: The risk and term structure of interest rates Mon.- Quiz 1 (last 30 mins); Wed.- Discuss Quiz 1 (last 30 mins)	**Midterm 1** **10:30-11:20am** **September 27, 2019**
Week 6	Chapter 6: The risk and term structure of interest rates (cont'd) Recap Midterm 1 Chapter 8: An economic analysis of financial structure	
Week 7	Chapter 9: Banking and the management of financial institutions Presentation topic 1: **Digital Money**	
Week 8	Chapter 9: Banking and the management of financial institutions (cont'd)	*HW#2* Due: October 14th (30 points)
Week 9	Chapter 13: Central Banks and the Federal Reserve System Presentation topic 2: **Role of the Fed**	
Week 10	Chapter 14: The Money Supply process Mon.- Quiz 2 (last 30 mins); Wed.- Discuss Quiz 2 (last 30 mins)	**Midterm 2** **10:30-11:20am** **November 1, 2019**
Week 11	Chapter 14: The Money Supply process (cont'd) Recap Midterm 2 Chapter 15: Tools of Monetary Policy	
Week 12	Chapter 15: Tools of Monetary Policy (cont'd) Chapter 16: The conduct of Monetary Policy (brief overview) Presentation topic 3: **Quantitative easing**	
Week 13	Chapter 22: Aggregate Demand and Supply Analysis	*HW#3* Due: November 18th (30 points)
THANKSGIVING BREAK		
Week 14	Chapter 22: Aggregate Demand and Supply Analysis (cont'd)	
Week 15	Full semester review; in-class practice questions and ***Reflective essay*** (14 points) due: December 13, 2019	*HW#4* Due: December 9th (30 points)
Final Exam: 230 points **11:50am – 1:40pm** **December 19, 2019**		

ECON530: Money and Banking
Data Analysis Practice Problems
(Main resources: Lecture Notes 6 and FRED database)

1. **Kicked to the "curve"!**

   Go to the St. Louis Federal Reserve FRED database, and find data on the following U.S. treasury securities: one-month (DGS1MO), three-month (DGS3MO), six-month (DGS6MO), one-year (DGS1), two-year (DGS2), three-year (DGS3), five-year (DGS5), seven-year (DGS7), ten-year (DGS10), twenty-year (DGS20), thirty-year (DGS30).

   (a) Construct a yield curve by creating a line graph for the **most recent day of data available** and for the same day (or close as possible to the same day) one year prior, across all maturities.

      i. How do the yield curves compare?
      ii. What does the change in slope say about potential economic conditions?

   (b) Google the date of the most recent Federal Open Market Committee (FOMC) policy statement.

      i. Construct yield curves for both the day before the policy statement was released and the day on which the policy statement was released.
      ii. Was there any significant change in the yield curve as a result of the policy statement?
      iii. How might this be explained?

2. **Risky business!**

   Go back to FRED database and find data on Moody's Aaa corporate bond yield (AAA) and Moody's Baa corporate bond yield (BAA). Download the data into a spreadsheet.

   (a) Calculate the spread (difference) between the Baa and Aaa corporate bond yields for the most recent month of data available. What does the difference represent?

   (b) Calculate the spread again, for the same month but one year prior, and compare the result to your answer in part (a).

   (c) What does this say about how the "spread" has changed over the past year?

3. **Magician's crystal ball or good economics?**

   Part of our job as financial economists is to make forecasts, informed by economic theory or market fundamentals. Using the supply and demand analysis for bonds:

   (a) Predict what will happen to interest rates on Microsoft's bonds if the federal government guarantees today that it will pay creditors if the corporation goes bankrupt in the future.

   (b) What will happen to the interest rate on treasury securities?

   (c) Predict what would happen to the risk premiums of municipal bonds if the federal government guarantees today that it will pay creditors if municipal governments default on their payments.

      i. Do you think that it will then make sense for municipal bonds to be exempt from income taxes?

ECON530: Money and Banking
Fall 2019
Final Exam

(230 points)

Date: December 19, 2019

11:50am - 1:40pm

Name: ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯

INSTRUCTIONS:

There are two sections in this exam:

- **Section I**, which contains **30 multiple choice questions (MCQs)** and

- **Section II**, which has **three short answer questions**.

  - **4 Bonus Points available at the end of Section II**

For the MCQs, bubble in the correct answer on the scantrons provided. **Make sure to fill out your scantrons properly with your name and ID number!** For short answer questions, please write legibly in the space provided or on the back of the paper if you wish.

Do not leave any questions blank! Justify your responses as best as possible.

Remember to label your graphs correctly!

GOOD LUCK! You got this! :)

1. The monetary liabilities of the Federal Reserve include

   (a) securities and loans to financial institutions.
   (b) currency in circulation and reserves.
   (c) securities and reserves.
   (d) currency in circulation and loans to financial institutions.

2. One way to derive aggregate demand is by looking at its four components, which are

   (a) consumer expenditures, planned investment spending, government spending, and taxes.
   (b) consumer expenditures, planned investment spending, government spending, and gross exports.
   (c) consumer expenditures, actual investment spending, government spending, and net exports.
   (d) consumer expenditures, planned investment spending, government spending, and net exports.

3. Which of the followings is NOT true about the word "autonomous" that economists use?

   (a) Changes in autonomous components are associated with shifts of a curve.
   (b) The autonomous component of a variable is exogenous.
   (c) The autonomous component of a variable is independent of other variables in the model.
   (d) The autonomous component of a variable is induced by other variables in the model.

4. Discount policy affects the money supply by affecting the volume of _____ and the _____.

   (a) borrowed reserves; monetary base
   (b) excess reserves; monetary base
   (c) excess reserves; money multiplier
   (d) borrowed reserves; money multiplier

5. Suppose that from a new checkable deposit, First National Bank holds eight million dollars on deposit with the Federal Reserve, one million dollars in required reserves, and faces a required reserve ratio of ten percent. Given this information, we can say First National Bank has _____ million dollars in vault cash. $FORMULA: TR = VC + D$

   (a) one
   (b) nine
   (c) two
   (d) ten

6. There are two ways in which the Fed can provide additional reserves to the banking system: it can _____ government bonds or it can _____ discount loans to commercial banks.

   (a) sell; extend
   (b) purchase; extend
   (c) sell; call in
   (d) purchase; call in

7. Everything else held constant, a decrease in net taxes _____ aggregate _____.

   (a) increases; demand
   (b) decreases; demand
   (c) decreases; supply
   (d) increases; supply

8. Suppose your payroll check is directly deposited to your checking account. Everything else held constant, total reserves in the banking system _____ and the monetary base _____.

   (a) decrease; increases
   (b) decrease; decreases
   (c) increase ; increase
   (d) remain unchanged; increases
   (e) remain unchanged; remains unchanged

9. The most common type of discount lending, _____ credit loans, are intended to help healthy banks with short-term liquidity problems that often result from temporary deposit outflows.

   (a) defensive
   (b) secondary
   (c) primary
   (d) temporary
   (e) seasonal

10. The discount rate is kept _____ the federal funds rate because the Fed prefers that _____.

   (a) below; banks can monitor each other for credit risk
   (b) above; banks can monitor each other for credit risk
   (c) below; the Fed can monitor banks for credit risk
   (d) above; the Fed can monitor banks for credit risk

11. Everything else held constant, a balanced budget <u>increase</u> in government spending (that is, an increase in government spending that is matched by an identical increase in net taxes) will

   (a) increase aggregate demand, but not by as much as if just government spending increases.
   (b) increase aggregate demand by more than if just government spending increases.
   (c) not affect aggregate demand.
   (d) decrease aggregate demand.

12. In the simple deposit expansion model, if the required reserve ratio (rrr) is 20 percent and the Fed increases reserves by $100, checkable deposits can potentially expand by
    $FORMULA: RR = rrr*D$

   (a) $100
   (b) $250
   (c) $500
   (d) $1,000

13. Decisions by depositors to increase their holdings of _____, or of banks to hold _____ will result in a smaller expansion of deposits than the simple model predicts.

   (a) deposits; required reserves
   (b) deposits; excess reserves
   (c) deposits; required reserves
   (d) currency; excess reserves
   (e) currency; borrowed reserves

14. TRUE or FALSE. The aggregate demand curve slopes downward with respect to the inflation rate because a fall in the inflation rate lowers real interest rates. Lower rates decrease investment, which decreases aggregate demand.

    (a) True
    (b) False

15. The Fed can exert more precise control over _____ than it can over _____.

    (a) high-powered money; reserves
    (b) high-powered money; the monetary base
    (c) the monetary base; high-powered money
    (d) reserves; high-powered money

16. The purpose of the commitment by the Fed to keep the federal funds rate at zero for a long period of time is to

    (a) lower the short term interest rates and increase inflation.
    (b) increase the long term interest rates.
    (c) lower inflation and short term interest rates
    (d) increase the short term interest rates.
    (e) lower the long term interest rates.

17. If the Fed injects reserves into the banking system and they are held as excess reserves, then the monetary base _____ and the money supply _____.

    (a) remains unchanged; remains unchanged
    (b) remains unchanged; increases
    (c) decreases; decreases
    (d) increases; increases
    (e) increases; remains unchanged

18. TRUE or FALSE. Suppose on any given day there is an excess demand of reserves in the federal funds market. If the Federal Reserve wishes to keep the federal funds rate at its current level, then the appropriate action for the Federal Reserve to take is a defensive open market purchase, everything else held constant.

    (a) True
    (b) False

19. The long-run rate of unemployment to which an economy always gravitates is the

    (a) normal rate of unemployment.
    (b) natural rate of unemployment.
    (c) neutral rate of unemployment.
    (d) inflationary rate of unemployment.
    (e) potential unemployment.

20. Everything else held constant, a change in workers' expectations about inflation will cause _____ to change.

    (a) aggregate demand
    (b) short-run aggregate supply
    (c) the production function
    (d) long-run aggregate supply

21. The most important advantage of discount policy is that the Fed can use it to

    (a) precisely control the monetary base.
    (b) perform its role as lender of last resort.
    (c) control the money supply.
    (d) punish banks that have deficient reserves.

22. Since the Federal Reserve sets the required reserve ratio to less than one, one dollar of reserves can support _____ of checkable deposits.

    (a) exactly one dollar
    (b) less than one dollar
    (c) more than one dollar
    (d) exactly twice the amount

23. If the banking system has a large amount of reserves, many banks will have excess reserves to lend and the federal funds rate will probably _____; if the level of reserves is low, few banks will have excess reserves to lend and the federal funds rate will probably _____.

    (a) fall; rise
    (b) fall; fall
    (c) rise; fall
    (d) rise; rise

24. The long-run aggregate supply curve shifts to the right when there is

    (a) an increase in the total amount of capital in the economy.
    (b) an increase in the available technology.
    (c) a decrease in the natural rate of unemployment.
    (d) both a) and b)
    (e) a), b) and c)

25. In the model of the money supply process, the bank's role in influencing the money supply process is represented by

    (a) the excess reserve.
    (b) both the excess reserve and the market interest rate.
    (c) the currency ratio.
    (d) only borrowed reserves.

26. If the Fed expects currency holdings to fall, it conducts open market _____ to offset the expected _____ in reserves.

    (a) purchases; increase
    (b) purchases; decrease
    (c) sales; increase
    (d) sales; decrease

27. Everything else held constant, which of the following does NOT cause aggregate demand to increase?

   (a) an increase in net exports
   (b) an increase in government spending
   (c) an increase in taxes
   (d) an increase in consumer optimism

28. A _____ in market interest rates relative to the discount rate will cause discount borrowing to _____.

   (a) rise; decrease
   (b) rise; increase
   (c) fall; increase
   (d) fall; remain unchanged

29. Open market sales shrink _____ thereby lowering _____.

   (a) the money multiplier; the money supply
   (b) the money multiplier; reserves and the monetary base
   (c) reserves and the monetary base; the money supply
   (d) the money base; the money multiplier

30. Everything else held constant, an autonomous monetary policy easing _____ planned investments, which _____ aggregate _____.

   (a) decreases; increases; demand
   (b) decreases; decreases; supply
   (c) increases; increases; supply
   (d) increases; increases; demand
   (e) increases; decreases; demand

Section II: Short Answer Questions.

Name: _____

A. The Money Supply Process (Total: 40 points)

31. (a) You are an intern at the Federal Reserve Bank of New York. If the Fed <u>sells $2 million of bonds</u> to EconoBank. Explain using a T-account what happens to reserves and the monetary base. **Draw T-accounts for Econobank and the Fed to receive full credit. (10 points)**

(b) Suppose that currency in circulation is $600 billion, the amount of checkable deposits is $900 billion, and excess reserves are $15 billion.

FORMULA: $MS = D + C$ or $MS = m * MB$; $c = C/D$; $e = ER/D$; $m = \frac{1+c}{rr+e+c}$

i. Calculate: (i) the money supply, (ii) the currency deposit ratio, (iii) the excess reserve ratio and (iv) the money multiplier. **(8 points)**

(c) During the global financial crisis, the Fed initiated several rounds of lending programs to bolster the economy. This led to an massive increase in the Fed's balance sheet and an **increase of over 350% in the monetary base**. In class we learnt that such a huge expansion in the monetary base could potentially lead to a large increase in money supply. However, the money supply only rose by 150%. How can we explain this? <u>HINT:</u> Use the money multiplier and money supply formula above to help explain your answer. **(4 points)**

(d) Connor is the Senior Director of Open Market Operations at the New York Fed. Due to a sharp contraction in the economy, as the lead economist on his team, you advised him to conduct an open market purchase of bonds held by banks of $1400 billion.

However, banks choose to hold all of these proceeds as excess reserves rather than loan them out, due to fear of a financial crisis. **Assuming that currency and deposits remain the same**, re-calculate the ratios from part b) and explain what happens to: (i) the amount of excess reserves, (ii) the excess reserve ratio, (iii) the money supply, and (iv) the money multiplier? **(12 points)**

(e) Explain two reasons why the Fed does not have complete control over the level of bank deposits and loans. **(6 points)**

B. Tools of Monetary Policy (Total: 40 points)

32. (a) During the semester, you each had the opportunity to give a presentation on a selected Money and Banking topic. You did an excellent job (as reflected in your presentation grade in CANVAS). Demonstrate that you actually learnt something from your preparation of the presentation by writing four (4) sentences on the topic you presented in class. **(7 points)**

(b) State whether the following statement is **true or false** <u>AND</u> **explain why**:

"An increase in the interest rate paid on excess reserves will always cause an increase in the federal reserve funds rate." **(8 points)** <u>HINT:</u> Use the market for reserves diagrams to illustrate your answer.

(c) Using the supply and demand analysis of the market for reserves, **indicate what happens to the (i) equilibrium federal funds rate, (ii) borrowed reserves, and (iii) non-borrowed reserves, holding everything else constant**, under the following situations:

    i. The Fed reduces the target federal funds rate. **Please label AND explain the figure correctly to receive full points. (10 points)**

Figure 1: Market for Reserves
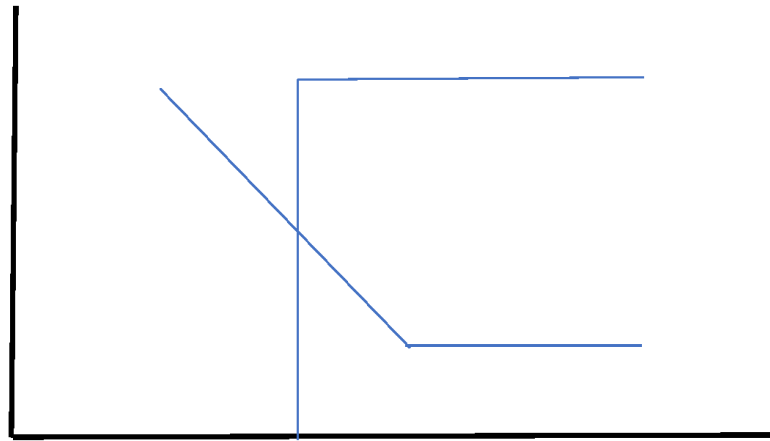
ii. The Fed reduces reserve requirements and then offsets this action by conducting an open market sale of securities. **Please <u>label</u> AND <u>explain</u> the figure correctly to receive full points. (15 points)**

Figure 2: Market for Reserves
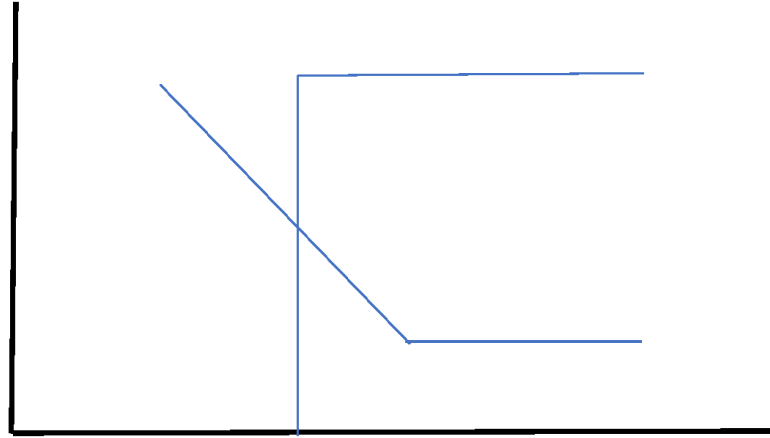
C. Aggregate Demand and Supply Analysis (Total: 30 points)

33. (a) **Identify and explain** three factors that can shift the aggregate demand curve to the right. **(12 points)**

    (b) **Identify and explain** three different demand shocks that can shift the aggregate demand curve to the left. The factors must be different from the ones listed in part a) above. **(12 points)**

    (c) **List three factors** that shift the short-run aggregate supply curve <u>AND</u> **explain one**. **(6 points)**

    (d) <u>**BONUS:**</u> **(Optional)**
    In class we saw that there is a long-run aggregate supply curve and a short-run aggregate supply curve. In two sentences, explain why aggregate supply differs in the long-run versus the short-run. **(4 points)**