

SPELMAN COLLEGE
Spring 2020, Economics 315 (CRN # 13390), Intermediate Microeconomic Theory, Giles 110
Tuesday and Thursday, 1:00 PM to 2:15 PM
Professor: Dr. Angelino C. G. Viceisza

OFFICE HOURS AND CONTACT INFORMATION

Office Hours: Thursdays, 10:45 AM to 12:45 PM; also available most Tuesdays (same time) and by appointment

Office Location: Department of Economics, Giles Hall, Room 403 (4th floor)

Office Phone: 404-270-6055 (please use email; more below)

Course website: Please check Moodle. *In absence thereof, I will make use of email and/or twitter.*

Personal research website: <https://www.angelinoviceisza.com>

Default email: aviceisz@spelman.edu; Back-up email only: viceisza@gmail.com

Twitter: @aviceisza #viceisza (follow me for last-minute updates, research opportunities, scholarships, etc.)

Note: I usually respond to simple questions via email (include ECON 315 in the subject line). I may, however, refer you to office hours. This tends to be the case for topics related to course performance.

REQUIRED TEXT AND VIDEOS

Nicholson, Walter and Christopher Snyder. 2018. *Microeconomic Theory: Basic Principles and Extensions*. 12th ed. Cengage Learning: Boston, MA. **Notice that Spelman participates in www.cengage.com/unlimited.** *You should also (1) watch the UCSD Intermediate Micro Video Handbook (IMVH) and select YouTube videos and (2) consult journals (or specific articles within) listed in the syllabus/notes, particularly as you work on your RP.*

COURSE DESCRIPTION

Economics is about different forms of behavior and decisionmaking. Microeconomics studies individual units, e.g. a consumer or a producer/firm/company. Accordingly, this course is organized into four parts: (1) consumer theory (e.g. utility maximization and its implications for individuals' choices); (2) producer theory (e.g. profit maximization and its implications for firms' choices); (3) markets where (1) and (2) may come together (e.g. partial equilibrium in a competitive labor market or general equilibrium across multiple markets in the economy), and (4) extensions (e.g. game theory as a way to model strategic interactions between individuals in the economy or behavioral economics which extends neoclassical economics by infusing insights from psychology).

Economics can also be broadly broken down into theory and empirics. Theoretical models in economics are mathematical "artifacts" that predict how the world should work. In other words, they use math to derive economic hypotheses that can be tested using real-world data. Empirical models, on the other hand, are statistical/econometric "artifacts" that use such real-world data to test the predictions/hypotheses from the theoretical model. So, theoretical and empirical models are NOT the same, but they are closely related.

ECON 315 Intermediate Microeconomic *Theory* primarily seeks to build the student's theoretical modelling skills. In other words, the course focuses on mathematical formulations of economics models and accordingly, uses algebra, multivariate calculus, optimization techniques and graphs to predict how individual units in the economy should behave. In fact, this is one of the main differences between ECON 242 (Principles of Micro) and ECON 315 – the use of rigorous mathematics to communicate economic concepts. ECON 315 also seeks to improve the student's understanding of theoretical models by means of applications. One application is a research paper in which the student must both develop a relevant theoretical model (given a research question of interest) and test the predictions from such model using an empirical model that analyzes real-world data using Stata.

PREREQUISITES

Economics 242 and Mathematics 211 (with a grade of C or higher) are required to take this course. The student must withdraw from this course if these prerequisites have not been met or prior approval has not been obtained from the professor. Failure to withdraw from the course will result in the student being administratively withdrawn from the course when this information is discovered. It is strongly recommended that the student complete ECON 303 (Econometrics) and ECON 304 (Mathematical Economics) before enrolling in this course, particularly given expectations associated with the research paper. If the student has not taken (or is concurrently taking) ECON 303, the student is advised to at least:

1. Watch this short video introducing “econometrics”, <https://goo.gl/RgBeQv>.
2. Go through the following note on “panel data”, <https://goo.gl/Fo24aC> (also on Moodle).
3. Access some of the Stata modules at the following website, <https://stats.idre.ucla.edu/stata/modules/>.
4. Seek assistance in office hours and/or tutoring (Student Success Program/SSP in Milligan) as necessary.

BEHAVIORAL OBJECTIVES

Upon completion of this course, the student should be able to:

1. Formulate theoretical microeconomic models in words, graphs, and mathematical terms (i.e. using multivariate calculus and optimization methods).
2. Mathematically derive testable hypotheses from such theoretical models (e.g. conditions for utility maximization, profit maximization, partial and general equilibrium, Nash equilibrium) using neoclassical and possibly, behavioral assumptions (e.g. social preferences, bounded rationality).
3. Use (1) and (2) to formulate empirical microeconomic models.
4. Run the model in (3) and interpret its findings; i.e. collect relevant data/variables and utilize statistical/econometric software (e.g. Stata, R) to run related regressions/analyses and interpret the coefficients.
5. Use (1)-(4) to derive/discuss policy implications.
6. Define, explain, recognize, and apply key components of microeconomics: (a) consumer theory, (b) producer theory, (c) partial and general equilibrium in markets, (d) game theory and uncertainty, and (e) departures from neoclassical economics, e.g. behavioral economics.
7. Relate economic theory to nonmarket problems.
8. Understand the differences between cross-sectional, time series, and panel data and their relevance for empirical microeconomic analysis.
9. Understand why sample size (of a data source) is important for deriving meaningful policy implications.

HOW TO APPROACH THIS COURSE

Econ 315 is a challenging, and by no means “spectator” course. In other words, the student should not expect that “just showing up to class” is sufficient to pass the course. The student is suggested to take at least the following steps in an effort to succeed in the course:

1. Watch the videos (posted on Moodle) and read the book chapters listed in the course outline **PRIOR TO CLASS**. Showing up to class unprepared, means that the student is already behind.
2. Consume the material discussed in class by asking questions and responding to questions posed by the professor as well as peers. The professor will periodically ask students to come to the board and discuss select topics. **Failing to engage with such activities will reduce the student’s participation grade.**
3. Review the videos, book chapters, and class notes again **AFTER CLASS**. Any issues that are still unclear should be discussed with the professor (email/office hours) and/or peer tutors at SSP weekly.
4. Take the quizzes (homework) and research paper seriously by linking those to the material discussed in class. In other words, use those as another opportunity to engage with and better understand the material. The quizzes (homework) in particular are intended to assist the student in staying on track with the material. However, they are the bare minimum in terms of practice with the material (see next item).

- Attend weekly work sessions conducted by the teaching assistant. This is an integral part of the course because class discussion is often times limited to theoretical discussions with limited, detailed examples. So, the work sessions will discuss textbook examples in much greater detail by “filling in the blanks”. While the work sessions are not mandatory, **they are VERY STRONGLY recommended.**
- Review all material prior to exams, possibly with cue cards and in small groups. Notice that if you have followed the above process, this will be at least the sixth time you are consuming the material.
- DO NOT FALL BEHIND IN THIS COURSE—START WORKING NOW!!!**

JUSTIFICATION FOR FOUR CREDITS

This is a four-credit, three-contact-hour course. To justify the additional credit, the student will be required to do the following outside of class:

- Very important:** Watch videos, read book chapters, and consume material **prior to and after class.**
- Complete take-home quizzes (typically, forward-looking based on material to be discussed in class).
- Complete a research paper.
- Attend a weekly work session conducted by the teaching assistant.

COURSE GRADING

The course grade will be determined as follows:

Two (2) exams	30% (15% each)
One (1) comprehensive final exam	30%
Quizzes (homework)	15% (six out of eight: 2.5% each)
Research paper	15%
Attendance and participation	10% (5% for attendance; 5% for participation)

The following grading scale will be employed:

Percentage Earned	Grade Earned	Percentage Earned	Grade Earned
93 – 100	A	70 – 74	C
90 – 92	A-	65 – 69	C-
87 – 89	B+	62 – 64	D+
83 – 86	B	58 – 61	D
79 – 82	B-	below 57	F
75 – 78	C+		

Note: (1) The above scale should be regarded as approximate as the instructor reserves the right to make adjustments in awarding final grades. (2) I typically grade exams with a “bump”.

QUIZZES (HOMEWORK)

Quizzes (homework) will open at 4:00 PM of a given day and close at 11:59 PM of the day after. So, a student will have 32 hours to complete a quiz. The dates listed in the course outline are **due dates.** Quizzes will be completed on/submitted via Moodle and close at midnight. This means that the student’s submission should be complete by 11:59 PM of **the stated due date.** **The student should plan accordingly since late submissions will receive a zero (0).** Please avoid losing points in an unnecessary manner by starting the quiz on time.

RESEARCH PAPER

The research paper (RP) should be based on a carefully developed research question that if properly executed can lead to, in the medium run, an independent study or senior thesis and, in the long run, a peer-reviewed journal

article. See rubric and notes at the end of the syllabus as well as the documents in the Moodle folder called “RP Guidelines” for additional expectations by stage and overall. The final stage of the RP should comprise the following components (excluding appendices such as references, tables, and figures/graphs):

- 1) A title page with author name(s) [in alphabetical order] followed by an abstract with keywords.
- 2) An introduction covering (2 pages):
 - a. The main research question and why we should care about it
 - b. A review of the literature and the contribution of your particular research question
 - c. The organization of the proposal
- 3) A theoretical model covering (2 pages):
 - a. The model setup and derivations
 - b. The testable hypotheses derived from this model
 - i. Note that in economics, a “model” typically means a conceptual framework that can be used to explain or predict what we observe in the real world. It is usually some text and quite a bit of math/algebra (possibly supported by graphs). We will see examples as we progress through the course, but to get a sense of economic models early on you should take a look at articles published in reputable economics journals as well as the course textbook and notes (see end of syllabus for some citations).
 - ii. A prime example of an economic model you should be familiar with is that of utility maximization. Let apples be x_1 , oranges be x_2 , and the price of apples and oranges be p_1 and p_2 respectively. A consumer’s utility over apples and oranges can be expressed as $U(x_1, x_2)$. The typical utility maximization model says that this consumer will:

$$\max_{\{x_1, x_2\}} U(x_1, x_2) \text{ s.t. } p_1x_1 + p_2x_2 = m$$
 where the latter represents a budget constraint and m is the money budget, e.g. from wages. This theoretical model aka “utility maximization” leads to predictions about the optimal amount of apples $x_1^*(p_1, p_2, m)$ and oranges $x_2^*(p_1, p_2, m)$ this consumer will “choose” in order to maximize utility given a set of prices and money budget. This is a “prediction” (aka hypothesis) from a theoretical model that can be tested using real-world data (aka an empirical model). See next item.
- 4) An empirical section covering (5 pages):
 - a. An empirical (i.e. regression) model that is informed by the aforementioned theoretical model.
 - b. A discussion of the data and sources (with a sufficiently large sample) used to construct variables for this empirical model as well as the definitions of the key variables in the empirical model.
 - c. A clear discussion of the results, i.e. interpretation of regression coefficients in light of the theoretical model/hypotheses, how these relate to prior literature, concerns about endogeneity etc.
 - d. Regression-output tables should be in an appendix and NOT in this section/the main text.**
- 5) A conclusion covering (1 page):
 - a. The main conclusions and policy implications resulting from the research.
 - b. Next steps for this and other research moving forward.

Notes:

1. The RP will pass two stages of review (Stage 1 and 2) prior to being submitted for final grading/Stage 3 (see course outline for due dates). **Stages 1, 2, 3 count for 1%, 4%, 10% of your grade respectively.**
2. You are allowed to work in groups of up to three people. If you choose to work in a group, please note:
 - a. You are responsible for choosing your group members and communicating those to me by Stage 1 of the RP. *All group member names should be listed in all submissions in alphabetical order.*
 - b. It is your responsibility to ensure that your group functions properly. I.e. it is up to you to divide the work and ensure that (1) there is no freeriding and (2) submissions occur ON TIME.
 - c. You should designate one of your group members to be the “Communications liaison”. This person will be responsible for submitting the group’s work on Moodle. If this person does NOT submit ON TIME, the whole group will suffer (see below).

- d. All group members will receive the exact same grade regardless of the circumstances.
 - e. **All group members must be present during office hours for any consultation meetings.**
 - f. All group members must be copied when contacting me via email regarding any RP issues.
 - g. Groups are fixed after Stage 1 and if members withdraw, others are responsible for the work.
3. The RP must be on a micro topic. This can include topics in applied micro fields such as behavioral, crime, development/poverty, environmental, entrepreneurship, finance, game theory, health, innovation, personnel, urban, etc. Look at the program for the National Bureau of Economic Research (NBER) Summer Institute, <https://www.nber.org/summer-institute/>, to draw inspiration for frontier topics. Please discuss with me during office hours. I reserve the right to reject a research question after Stage 1.

FORMATTING

All written documentation submitted in this course (in particular, the different stages of the research paper) should be in Times New Roman 11-point font with 1.5 spacing and 1-inch margins all around. **ANY FILES THAT ARE UPLOADED TO MOODLE SHOULD BE LESS THAN 2 MB.**

MAKE-UP POLICIES AND EXTRA CREDIT

1. **REGULAR EXAMS:** There are absolutely **NO** make-up exams, whether the absence is excused or not. In case an absence is excused by the Office of the Dean within a week of the missed exam date, I reserve the right to prorate the weight of the missed exam over the remaining exams.
2. **FINAL EXAM:** The final exam absolutely **CANNOT** be made up. If a student misses the final exam, the student will receive a zero (0) for the exam. An exception **may** be made if a student seeks approval from me **PRIOR** to the exam by providing a valid documented excuse approved by the Office of the Dean. Even in this case, I still reserve the right to deny the student's request.
3. **QUIZZES:** There are absolutely **NO** make-up quizzes, whether the absence is excused or not. I will drop the two (2) lowest quiz grades when determining the student's overall grade. For example, if a student misses two quizzes, the student will receive a zero (0) but those will be dropped.
4. **RP:** These components absolutely **CANNOT** be made up, whether excused or not. If a student or group misses them, the student/members will receive a zero (0).
5. **TARDINESS:** Late submissions will **NOT** be accepted. They will receive a zero (0).
6. **EXTRA CREDIT:** It is my experience that most students fail to submit all possible assignments. As such, it does not make economic sense to give opportunities for extra credit since students are not making use of the opportunities already afforded to them. So, I will **NOT** give extra credit, regardless of the student's circumstances.

THERE ARE NO EXCEPTIONS TO ANY OF THESE RULES.

ATTENDANCE AND PARTICIPATION POLICY

Class attendance and participation are mandatory, as these are integral parts of the class. *As such, 10% of your class grade comes from these components.* Please note the following:

1. Attendance is taken at the beginning of each class.
2. For students who have the habit of arriving after the class begins, I reserve the right to count these as absences. The student is considered late if the student is not present when class begins. I typically count tardiness as an absence if the student arrives after I finished taking attendance. In case of excessive lateness (ten minutes after class begins), I reserve the right to bar a student from entering the classroom.
3. If a student misses zero (0, no) classes, the student receives 100 for the attendance portion of the grade. If a student misses one (1) unexcused class, the student receives 95 for attendance. If a student misses two (2) unexcused classes, the student receives 90 for attendance. Any student with three (3) or more unexcused absences will receive a zero (0) for attendance. *So, the student loses 5% of the course grade.*

4. **Any student with five (5) or more absences (excused or unexcused) will be administratively withdrawn from the course. I will email the student a notification and proceed by processing such withdrawal through the Offices of the Dean of Undergraduate Studies and the Registrar.**
5. Class participation will be judged based on thoughtful questions and discussions, active participation (e.g. coming to the board), **and** lack of disruptive behavior during class (see General Code of Conduct section of this syllabus). In particular, if a student uses a cell phone during class (without my permission), the student will receive a zero (0) for participation. *So, the student loses 5% of the course grade.*
THERE ARE NO EXCEPTIONS TO ANY OF THESE RULES.

EXAMS: ACCESS, CALCULATOR, AND TECHNOLOGY POLICY

Exams in this course are not permitted to enter “the public domain”. Although there is no obligation to allow the student to review exams after they have been reviewed in class and collected, if a student wishes to review an exam, I will typically accommodate the student during office hours.

The following exam-taking policy shall apply:

1. All students must “completely turn off” their cell phone(s) prior to an exam, place it in their bag, and place their bag (and any other personal belongings) at the periphery of the room. Also, remove any watches (traditional or electronic – e.g. Apple watches) or any other devices.
2. The following are the **ONLY** items that may be permitted next to the student while taking an exam:
 - a. The exam paper (given by the professor). **NO SCRATCH PAPER.**
 - b. 1-2 number two pencils and possibly, a pen.
 - c. An eraser and/or white-out.
 - d. Either a SIMPLE or SCIENTIFIC calculator.
 - i. GRAPHING or FINANCIAL calculators are NOT allowed.
 - ii. You are NOT allowed to share calculators with another student.
 - iii. You are of course NOT allowed to use a cellular phone as a calculator (as it will be in your bag, as stated above).
 - e. No food, drink, or anything else is allowed while taking an exam.
3. Students should space themselves properly (1-2 seats apart) and NOT communicate in any way. If they do or if I have the feeling that they are, it will be considered cheating.
4. All headwear should be removed (hats, turbans, etc.) unless it is for religious purposes.

Failure to comply with any of these policies will be considered cheating as defined by the Spelman College Bulletin. *See next item.*

ACADEMIC INTEGRITY

The following is Spelman College’s **Academic Integrity Policy**:

“At the heart of Spelman College’s mission is academic excellence, along with the development of intellectual, ethical and leadership qualities. These goals can only flourish in an institutional environment where every member of the College affirms honesty, trust, and mutual respect. All members of the academic community of Spelman College are expected to understand and follow the basic standards of honesty and integrity, upholding a commitment to high ethical standards. Students are expected to read and abide by the Spelman College Code of Conduct (see the Spelman College Student Handbook) and are expected to behave as mature and responsible members of the Spelman College academic community. Students are expected to follow ethical standards in their personal conduct and in their behavior towards other members of the community. They are expected to observe basic honesty in their work, words, ideas, and actions. Failure to do so is a violation of the Spelman College Academic Integrity Policy.”

Violators will be subject to the sanctions outlined in the Spelman College Bulletin, which range from failing the course to expulsion.

GENERAL CODE OF CONDUCT (INCLUDING TECHNOLOGY AND CELL PHONE USE POLICY)

It is understood that any student participating in this course will show conduct in a manner that is constructive and non-disruptive to the learning environment. This is out of mutual respect for the professor as well as fellow students. With this in mind, use of any form of technology—including computers, cell phones, Apple watches, etc.—is only allowed if it is absolutely necessary for the student’s learning within the course. If so, the student should see me by the end of the first day of class to discuss and potentially obtain permission to use such a technology. Even if granted, I still reserve the right to revoke this privilege if I notice that such technology is being used for purposes other than learning related to the course. In fact, research suggests that students who use technology (e.g. laptops) in the classroom are more likely to perform worse in their courses.

In the absence of such permission, use of technologies is strictly prohibited unless the professor explicitly requests the students to use such technologies. The student should turn off cell phones, laptops, tablets, or any other noise-making devices while in class as these can generally be considered disruptive. Any such disturbances will result in automatic eviction from class. NO EXCEPTIONS!!!

DISABILITY STATEMENT

The following is Spelman College’s **Disability Statement**:

“Spelman College is committed to ensuring the full participation of all students in its programs. If you have a documented disability (or think you may have a disability) and, as a result, need a reasonable accommodation to participate in class, complete course requirements, or benefit from the College’s programs or services, you should contact the Office of Disability Services (ODS) as soon as possible. To receive any academic accommodation, you must be appropriately registered with ODS. The ODS works with students confidentially and does not disclose any disability-related information without their permission. ODS serves as a clearinghouse on disability issues and works in partnership with faculty and all other student service offices. For further information about services for students with disabilities, please contact the ODS at 404-270-5289 (voice), located in MacVicar Hall, Room 106.”

STUDENT SUCCESS PROGRAM (SSP)

The SSP (see <https://www.spelman.edu/academics/ssp>) is located in the Milligan Building, 2nd floor. The Program provides peer tutors for various subject areas, including economics. The schedule of times when peer tutors will be available can be acquired from SSP. This is a valuable resource for student learning and students are urged to avail themselves of their services. Peer tutors have previously been successful in economics courses.

GENERAL REMARKS

1. Students are expected to plan their air travel at the end of the semester so that it does not conflict with the final exam. The same applies to other types of travel throughout the semester.
2. Students should select a “buddy” in the course from whom they can obtain materials in case they miss class. It is the student’s responsibility to obtain such material and stay up to speed.
3. The syllabus provides a general plan for the course; deviations may be necessary.

COURSE OUTLINE

Date	Topic	Quizzes or RP	Video
1/16	Syllabus/intro		
1/21	Chapter 1-2	Quiz 1 assigned and due 1/22	1.1-1.6 (also see notes) B3 Empirical models/data (notes) and 2.12 2.1-2.3 (also see calculus suppl.) A4a-b
1/23	Chapter 1-2		2.3, 2.5 A4a-b, c-d 2.4, 2.6 A5
1/28	Chapter 3		3.1-3.4 C1a-c, e-g
1/30	Chapter 3	Quiz 2 assigned and due 1/31	3.4-3.6 C1g-k
2/4	Chapter 4	1 st draft of RP due 2/5	4.2-4.3 C2a-c, C2i, A4e
2/6	Chapter 4		4.4-4.7 C5
2/11	Chapter 4-5		5.1, 5.4-5.5 C2d-h, C5
2/13	Chapter 5-6	Quiz 3 assigned and due 2/14	5.2-5.3 A1, C3-4, C6 5.6-5.7 (including Slutsky) A1, C3-4, C6
2/18	Chapter 5-6		5.8 C7 6.1-6.5 C2-6 (review them!)
2/20	Chapter 7		7.1-7.8 C10
<u>2/25: Exam 1 (Chapters 1-6)</u>			
2/27	Chapter 8	Quiz 4 assigned and due 2/28	8.1-8.4, 8.12 F1a-d, F2a, F2g-i
3/3	Chapter 9		D1 (all but "L")
3/5	Chapter 9	Quiz 5 assigned and due 3/6	D1 (all but "L")
<u>3/10, 3/12: NO CLASS due to Spring Break (2nd draft of RP due 3/15)</u>			
3/16: Midterm grades submitted via Banner			
3/17	Chapter 10		D2
3/19	Chapter 10		D2
3/24	Chapter 11	Quiz 6 assigned and due 3/25	D3
3/26	Chapter 11		D3
3/26: Last day to withdraw with a "W"			
3/31	Chapter 12		E1
4/2	Chapter 12	Quiz 7 assigned and due 4/3	E1
<u>4/7: Exam 2 (Chapters 7-12)</u>			
<u>4/9, 4/14, 4/16: NO CLASS due to Founders Day and Research Day</u>			
4/21	Chapter 13		E2
4/23	Chapter 13	3 rd & final draft of RP due 4/26	E2
4/28	Review	Quiz 8 assigned and due 4/29	Review all videos/concepts
<u>COMPREHENSIVE FINAL EXAM ON MONDAY, MAY 4 FROM 10:30 AM – 12:30 PM</u>			

TYPICAL GRADING RUBRIC FOR THE RP

Rank	Content Quality	Quality of Written Exposition	Approximate score
Exemplary	The paper is technically strong in that it comprises (1) an excellent literature review, (2) a well-developed theoretical model, (3) a well-developed empirical strategy (with appropriate data) and set of results testing the hypotheses derived from 2, (4) a discussion of conclusions and policy implications, and (5) a discussion of ways forward.	The paper is written in an academic manner, following typical standards observed in the literature. This applies both to the use of the English language (grammar, spelling, and so on), but also to the use of mathematical notation. Notation needs to be used as appropriate and be properly defined. The student should use academic articles in top peer-reviewed journals as a guide (see course reading list for examples of such articles as well as advice provided further below).	90-100
Accomplished	The paper is strong in categories (1), (2), (3), and (5), but is lacking in category (4).	The paper uses notation inappropriately.	85-89
Acceptable	The paper is strong in categories (1), (2), and (3), but is lacking in categories (4) and (5).	The paper uses notation inappropriately and does not necessarily read as an academic article.	80-84
Minimally Acceptable	The paper is lacking in any of the categories (1), (2), or (3).	Same as former.	75-79
Emerging	The paper is lacking in two of the categories (1), (2), and (3).	Same as former.	70-74
Unacceptable	The paper is lacking in all categories.	Same as former.	69 and below

Other tips/issues for consideration for the RP:

1. It is imperative that the student start with a proper research question that is informed by and sufficiently different from prior literature.
2. Generally, references must come from a reputable source, for example:
 - Journal articles; e.g. *American Economic Journal: Applied Economics*, *American Economic Review*, *Econometrica*, *Experimental Economics*, *Games and Economic Behavior*, *Journal of Development Economics*, *Journal of Health Economics*, *Journal of Labor Economics*, *Journal of Public Economics*, *Journal of Political Economy*, *Journal of Urban Economics*, *Review of Black Political Economy*, *Review of Economics and Statistics*, *Review of Economic Studies*, and *Quarterly Journal of Economics*.
 - Working papers from reputable sources such as www.nber.org or faculty research pages (e.g. while searching Google Scholar).
 - Discuss with me during office hours to get insights into additional references.
 - Visit AUC Woodruff Library and speak to the “Economics/Business” Librarian. You can contact them via email (see library website). E.g. you can use their services (such as interlibrary loan) to access journals and NBER working papers electronically.
3. Make sure to clearly differentiate between a theoretical and an empirical model.
4. Finally, the student should read the “*additional guidelines for research paper*” posted in the “*RP Guidelines*” folder on Moodle.