

Instructor	Anand Murugesan	Course	ECON 100
Number of Students	21	Length of Visit	60 min
Time of Class	3:00pm	Observation Date	July 24, 2014

Time	Professor	Student	Observation
2:58	1o1	L, O	▪ Instructor is having a one-on-one discussion with a student ▪ Students are on laptops, using nonacademic sites, no conversations
3:00	W	W	
3:01	Adm, PQ, AnQ	W, L	▪ Class starts ▪ Instructor asks a student a question and the student replies while the instructor passes around blue books. ▪ Student asks instructor to put up slides, instructor does so.
3:02	Lec	L	▪ Instructor tells class what today's lecture is about. Instructor elaborates on the agenda items while walking in front of class and making eye contact. ▪ Student walks in. ▪ Students on laptop for nonacademic purposes –weather, Facebook, games, settings, shopping. ▪ Instructor acknowledges SATAL for coming in for videotaping.
3:03	Lec	L	▪ Instructor changes the PowerPoint slide to present the lecture outline while walking back and forth in front of class. ▪ Half of the students are focusing on their laptops. ▪ Instructor discusses each bullet point in the slide, uses gestures, and walks back and forth, and makes occasional eye contact with students.
3:05	Lec	L	▪ Instructor changes slide, walks back and forth, makes occasional eye contact with students and uses gestures to explain the slide. ▪ About half of students continue to watch instructor, whereas other half continue to look at laptops. ▪ Student walks in, causes mild interruption
3:06	Lec, RtW	L	▪ Instructor draws a diagram on board while lecturing. ▪ Students continue focusing on their computers or listening to instructor. ▪ Some students go to CROPS to open slides. ▪ Instructor gestures to explain concept on the board.
3:08	Lec, RtW	L	▪ Instructor moves away from board, continues lecturing while walking back and forth. ▪ Instructor moves back to board and writes equation on board while lecturing. Instructor explains equation while facing board. Makes eye contact with students for about two seconds and gestures. ▪ At least five students are taking handwritten notes. ▪ Student walks in late. ▪ One student tries to plug in his laptop, disrupting that section of the class.

3:09	Lec	L	▪ Instructor asks the class a question and promptly provides an answer while gesturing and walking in front of class. ▪ Instructor changes slide and explains the image on the slide using gestures and looks at the whiteboard while explaining. ▪ Late student causes rustling and hushed conversation in front middle, as well as some shuffling of chairs.
3:11	Lec	L	▪ 11/20 students are facing forward. ▪ Instructor changes slide and walks in front of class while gesturing and transitions to a new slide. He then poses a question “What is long run?” and answers promptly. He makes occasional eye contact with students for about two-three second intervals. ▪ Instructor asks class question (“What is availability input?”), and he promptly answers it explaining the concept.
3:12	Lec	L	▪ 11 students continue facing forward (some of those students are not the same 11 students from 3:11pm).
3:13	Lec	L	▪ About five students have the PowerPoint lecture on their computers.
3:14	Lec	L	▪ Students using computer that were once paying attention change browser tabs to nonacademic sites. ▪ Student walks in, causing no disruption.
3:15	Lec, RtW	L	▪ Instructor walks to whiteboard and explains the concept in the slide. ▪ Instructor continues lecturing; he walks back to laptop, changes slide and introduces a new topic. ▪ Instructor walks to the whiteboard, erases previously written equation, draws a graph and explains it. Instructor makes occasional eye contact with students and gestures while explaining the graph. ▪ Instructor speaks fast.
3:16	Lec	L	▪ Seven students are following along with the PowerPoint. ▪ Some of the students are on nonacademic sites.
3:17	Lec	L	▪ Instructor asks class “What is the second key property?” Instructor promptly answers his own question. ▪ Instructor then walks back to the board and uses diagram to explain the new concept. Instructor lectures in front of the board, uses gestures, makes long eye contact with students while explaining the concept. ▪ About half of the students are facing forward and about half are facing down towards their laptops or notebook.
3:19	Lec	L	▪ Most students’ heads are down during this part of lecture.
3:20	Lec, AnQ, RtW	L, SQ	▪ Student 1 asks question “Do we just assume it’s always increasing?” ▪ Instructor responds and goes over the material slower and more in depth by writing on the whiteboard and using gestures while explaining.
3:21	Lec, AnQ, RtW	L, SQ	▪ Most of the students are not looking up at the instructor. ▪ Student 1 interrupts the instructor to ask a follow-up question, “So eventually it will decrease...?” The instructor maintains eye contact with student 1. ▪ Instructor replies “Eventually it will decrease... yes yes...” Instructor maintains

			eye contact with student as he explains the answer. He uses the whiteboard to assist in answering her question. Student 1 nods in agreement as instructor answers the question.
3:22	Lec, AnQ, 1o1	L, SQ	8/21 students are looking at the instructor. - Student 2 raises his hand, and the instructor makes eye contact and responds with “Yes?” - Student 2 then asks a follow-up question, “So it’s about managing capital?” - Instructor replies “It’s a combination of the two…” while maintaining eye contact with the student and gesturing.
3:23	Lec, AnQ, 1o1	L, SQ	- Student 2 asks another follow-up question. - Instructor walks in front of the class and answers using gestures. - Student in the back consults textbook.
3:24	Lec, RtW	L	- Instructor erases right diagram and writes another equation. - Instructor walks to projector screen to explain equation and gestures. Instructor stands facing the slide while lecturing. - Some students on their laptops leave the lecture slides and move to nonacademic sites and seem disengaged (students are leaning back, arms across chest or leaning forward resting on arm with hand on face)
3:25		L	Four students are on the PowerPoint slides while others are listening to lecture or taking notes. Some students are off task on their computers.
3:26	Lec, PQ, W	L	- Instructor asks class “Is that clear?” Some students nod head and instructor continues lecturing making reference to slide and using gesturing. - Seven students return to the PowerPoint on their computers, as the instructor goes back to the PowerPoint.
3:27	Lec, 1o1, RtW	L	- Instructor changes slide and explains it while pointing to screen. - Instructor asks class “What’s the marginal part?” He immediately answers. Instructor then asks another question, “What’s the marginal part of two?” Instructor immediately explains answer. A student offers a correct answer by saying “That’s eight.” Instructor replies “Say again?” Instructor then understands the student is correcting his [instructor’s] previous answer. - Instructor lectures while pointing and looking at the screen.
3:28	Lec, PQ	L	- Instructor asks back of class “Can you see?” while maintaining eye contact with students. A student at the back nods head yes. - Instructor begins to lecture again. - Eight students are looking up at the instructor.
3:29	Lec	L	- Instructor lectures using gestures and looking at the board. - Instructor sits on desk while explaining slide, and then stands up and continues lecturing. - Most students doing nonacademic activities on laptop/phone.
3:30	Lec	L	- Instructor changes slide, then asks the class “What is a very fundamental thing we have to take from this?” Instructor immediately answers and walks in front of class, explains the concept looking at the screen and gesturing. - Instructor changes the slide back and forth to explain the concept in depth. - Four students are following along on the PowerPoint, while three students are taking notes.

3:31	Lec	L	▪ Instructor changes slide again and begins walking front of class to explain new slide using gesturing and maintaining eye contact with students. ▪ Four students follow along on the PowerPoint, three students are taking notes.
3:33	Lec	L	▪ Instructor asks the class “Does that mean [Name of Theorist] is wrong?” with eyes on the screen. The instructor then answers promptly, “No not quite...” Instructor then continues lecturing with gestures and making eye contact with students. ▪ Most students have their heads facing down during the lecture. ▪ Some students are still following along on the slides.
3:34	Lec, AnQ	L, SQ	▪ Instructor changes slides and notices a student raising hand. Instructor replies with “Yes?” Student 3 asks “So it will decrease since it produces land?” Instructor replies with “Essentially it will...” Instructor continues to answer student’s question. Instructor then changes slide to a graph to explain answer thoroughly.
3:35	Lec, AnQ, 1o1	L, SQ	▪ Six students seem attentive, taking notes or facing the instructor. ▪ Student 3 then asks follow-up question about iPhones, and instructor answers the question. Instructor makes contact with her while explaining the iPhone question, and gestures. Student replies, “Okay” then instructor continues to lecture.
3:37	Lec, RtW	L	▪ Instructor changes slides, walks to the whiteboard and draws a graph to explain concept. ▪ Four students are actively taking notes as the instructor demonstrates a point by drawing a graph on the board. ▪ Instructor asks question to class then answers to explain the concept, while writing on white board and pointing at the graph.
3:39	Lec, PQ, W, RtW	L	▪ Instructor continues to lecture in front of the board. Instructor then asks another question regarding the same table, and a student immediately answers. ▪ Instructor writes answers on board as students are answering his questions. Instructor maintains eye contact with the student as they answer his questions.
3:40	Lec, AnQ	L, SQ	▪ Student 4 asks, “Are you more concerned with impact of marginal product?” Instructor replies, “We will see...we will see an example...” ▪ Instructor changes slide and starts lecturing, making reference to a graph on screen. Instructor is looking at the board. Instructor then makes eye contact with students for a second, and then begins lecturing again.
3:42		L	▪ Students open the slides and are not looking up at the instructor.
3:43	Lec	L, SQ	▪ Instructor asks class, “Do you stop at the max or...?” Instructor answers the question promptly and points to the slide. The instructor is using a graph on the slide to further explain the answer. Instructor makes eye contact with Student 4 and the board while still answering the question. Instructor uses gestures to answer. Student 4 nods head in agreement as instructor explains and makes eye contact.
3:44	Lec, AnQ, 1o1	L, SQ	▪ 3-4 students are actively listening or taking notes. ▪ Student 4 asks the question “Does the quality of worker depend..?” ▪ Instructor replies with “Essentially all workers are uniform quality...” While answering the question, the instructor points to a part of the graph onscreen and makes eye contact with student. Instructor commends student, “It’s a good question. It depends on nature of...” and makes eye contact with student.

			Student 4 makes a comment, and instructor turns around to make eye contact and responds back.
3:45	Lec	L	- Instructor changes the slide and begins lecturing while walking to the board. - Instructor points to right diagram while lecturing, and asks the class, “What is marginal..?” Instructor answers promptly while writing on the graph drawn on board. As the instructor explains the concept, he keeps looking at the board and gesturing. Instructor then walks in front of the screen and elaborates on the concept. - Most students have their heads down.
3:46	Lec	L	- Few students are writing on paper. - The instructor says “I will tell a joke.” Most of the students look forward. - Instructor then begins to tell a joke to help explain the concept more. Instructor is also maintaining eye contact with students and using gestures. Two students chuckle and the rest provide little response.
3:47		L	Students return their attention to their laptops.
3:48	Lec	L	- Instructor continues to explain concepts on the same slide and asks the class “What does it mean?”. Instructor answers the question promptly and walks back and forth in front of the class while gesturing. - Instructor asks the class “What if their average GDP is 3?” Instructor then answers promptly, making eye contact and gesturing. Instructor then informs students, “We will see this in a picture,” referring to the next slide. - Two thirds of the students are working in their laptops.
3:49	Lec	L	- Instructor changes the slide and walks to the screen to explain the picture on the new slide. Instructor walks back and forth from the screen to the whiteboard while lecturing. - Instructor then asks class, “When is the marginal and...going to intersect?” Instructor answers promptly and points to parts of graph while explaining. - The slide changes randomly, but the instructor changes it back to continue with lecture. Instructor gestures and maintains eye contact with board while lecturing. - About five students are viewing slides and looking forward.
3:52	Lec	L	- Instructor asks the class “What did we just talk about?” Instructor answers promptly looking at the board and gesturing. - Students shift in their seats and more than half are looking forward
3:53	Lec	L	- Instructor then changes the slide and continues lecturing while gesturing, walking in front of class and looking mainly at the screen. - Instructor states that they “will be going over an important example,” then the students begin to look up.
3:54	Lec, W, PQ, AnQ	L	- Instructor asks the class a question about the example, and some students raise hands to indicate their choice. Instructor then replies, “So some of you have no answer.” Instructor maintains eye contact with students while asking them the question. - Student 3 asks the instructor, “So that one will decrease?” Instructor answers and makes eye contact with her.

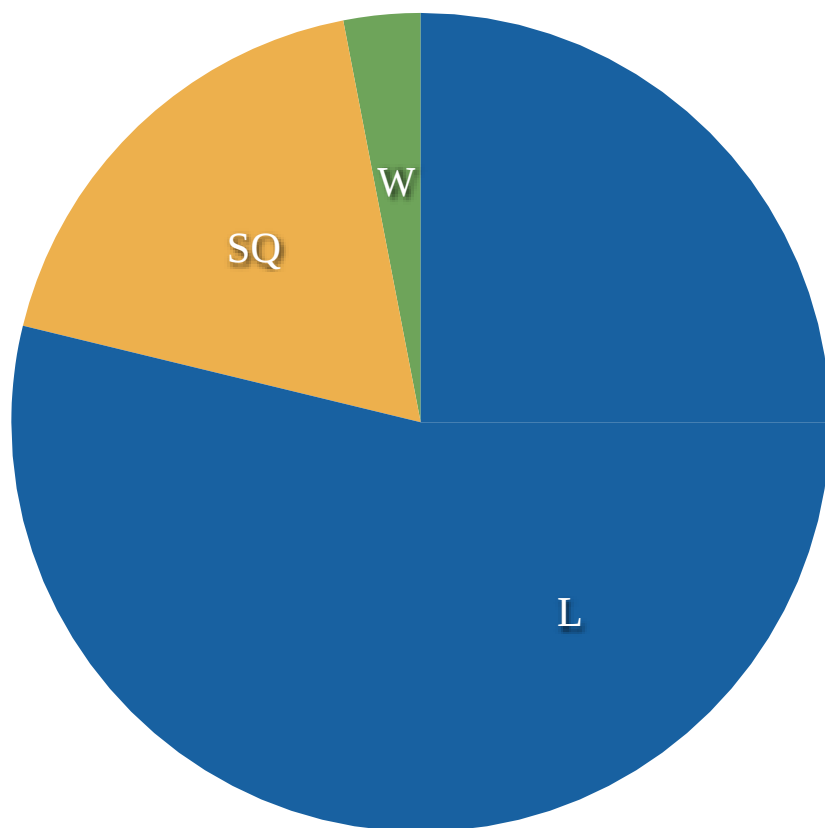
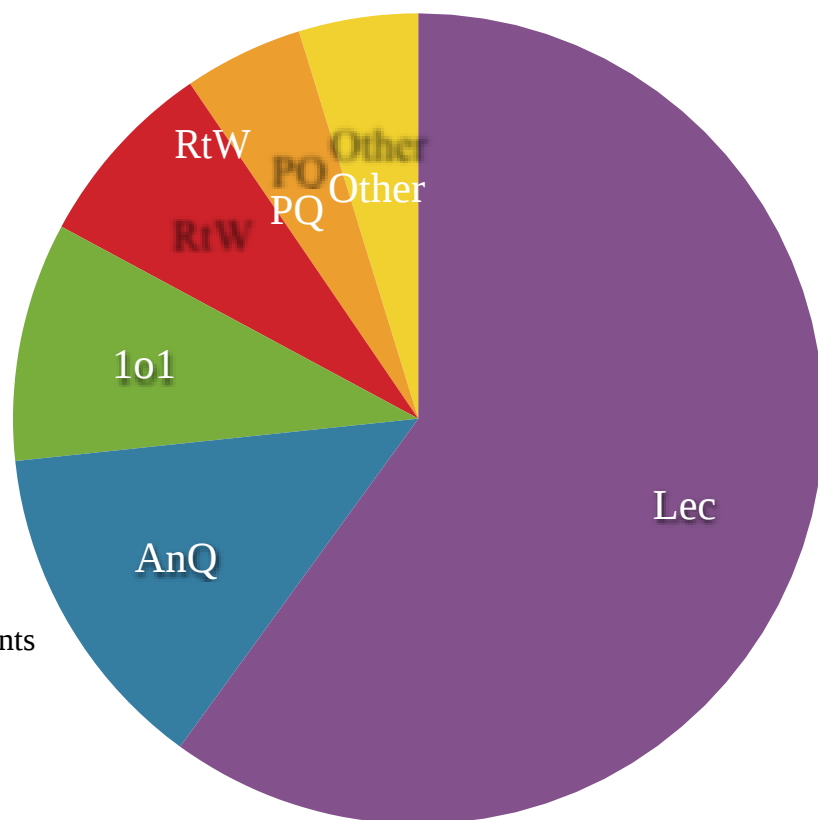
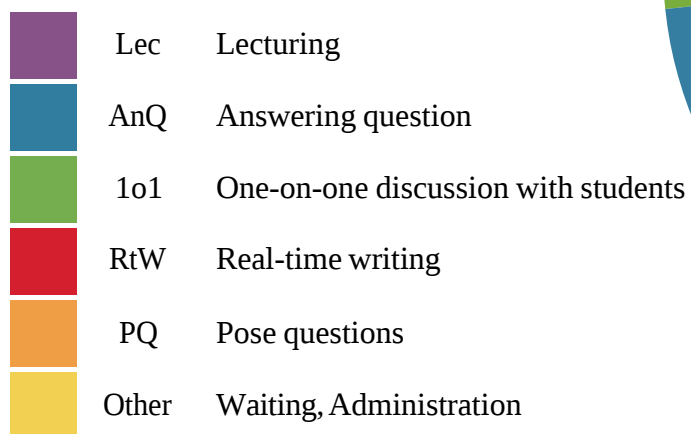
3:55	Lec, AnQ, 1o1	L	▪ Instructor continues lecturing and another student interrupts with a comment, "...Yield..." The instructor replies, "Yield stays indefinitely..." Instructor then stares at screen for three seconds after answering student's question. Instructor then re-answers student's question while making eye contact with her and the board. The instructor gestures while looking at screen. ▪ Two girls in the middle converse quietly, possibly talking about the question.
3:56	Lec	L	▪ Instructor continues to lecture and gestures in front of the screen and points to parts of the screen to explain a concept. ▪ Instructor then pauses and looks at screen for 12 seconds, then begins to explain marginal product. ▪ Instructor maintains eye contact with the screen and then continues to lecture and points to graph on screen to explain the concept. ▪ Students look to each other due to a typo on slides, also whisper about it.
3:57	Lec, 1o1	L	▪ Instructor looks towards a student and asks, "Doesn't that answer your question?" Student 4 replies, "It does." Instructor then elaborates.
3:58	Lec, AnQ, 1o1	L, SQ	▪ Instructor continues lecturing, and then Student 1 raises her hand. ▪ Instructor notices and makes eye contact with Student 1. Student 1 asks a question and instructor listens and immediately answers her question. Instructor reassures the student, "Your answers aren't incorrect." Instructor uses gestures and changes slide to help explain student's question while making some eye contact with her. ▪ Students are facing towards the front of the class. ▪ Instructor then pauses for two seconds while looking at slides. Student 1 re-states her question; instructor listens and looks at screen.
3:59	Lec, 1o1, AnQ	L, SQ	▪ Instructor commends student, "You're right" then answers question thoroughly while looking at the screen. Instructor agrees with the student and continues to answer the question using gestures and pointing to screen while making eye contact with student. ▪ Students are still looking forward.
4:00	Lec, 1o1, AnQ	L, SQ	▪ Student 1 then asks another question, and the instructor explains the question while looking at board and pointing to graph on screen. ▪ Student and instructor's interaction continue as class observers leave.

Classroom Environment

There is poor visibility of the PowerPoint from the back with front row students obstructing the screen.

Instructor's vocal projection is loud enough for all students to hear. Instructor's lecture speed is a bit fast for class observer to follow.

Instructor Activity



Student Activity

