SYLLABUS FOR ECONOMICS 301 – COLLECTION AND USE OF DATA IN ECONOMICS
Fall 2011

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Office Hours: Th 12:30-3pm
F 10-11:30am
and by appointment

Course Description and Objectives:
The primary goal of this course is to make you better economists by developing your skills with data and empirical analysis. We will examine why and how economists use data, where and how to find the type of data that economists commonly use, and best practices in the presentation of empirical analysis to both economist and non-economist audiences, primarily using Microsoft Excel. The data ‘literacy’ skills you sharpen in this course will prepare you for research projects in other upper division courses, make you more attractive to potential employers, and make you a more informed consumer of empirical information in the media and elsewhere.

Specifically, by the end of this course, you should be able to:
1. Identify the normative motivations for, and implications of, empirical economic analysis;
2. Identify and evaluate bias (including your own) in the development, presentation and interpretation of empirical analysis;
3. Complete a simple data analysis, including
   a. propose an empirical hypothesis;
   b. select and find appropriate variables and data sources to test that hypothesis;
   c. analyze the data in Microsoft Excel using appropriate statistical techniques; and
   d. visually present the data/results by creating appropriate tables, charts or graphs in Microsoft Excel;
4. Critically evaluate empirical claims that you see in the media and in business and government reports.
(see Course Outline for more specifics)

Prerequisites and expectations:
It is expected that you are already familiar with basic statistical concepts and Excel so that we can focus on how to apply and use that knowledge. You must have earned a grade of C or better in Economics 101 and 102; Economics 201 or Statistics 119; and Information and Decision Systems 180. Please note that if you cannot provide evidence that you have met these requirements before the second class meeting, you will be dropped from the course.

There is a statistics knowledge survey on Blackboard (under Assignments) that can help you assess your need for review. This must be completed by the beginning of the second class meeting. In addition, at the beginning of each section of the course, there will be guides alerting you to the specific statistical concepts you will need, almost all of which you should have seen in the prereq courses. If it has been a while since you took statistics, there are materials and links posted on Blackboard to help you review.
**Required Readings and Materials:**
Klass, Gary (2008), *Just Plain Data Analysis: Finding, Presenting and Interpreting Social Science Data*

All three books should be available at the SDSU bookstore. Additional assigned articles and readings will be posted on Blackboard. Throughout the semester, students are also encouraged to look for examples of data and statistics in the mainstream media (see the course website for some suggested links).

**Access to a personal computer:** You will need a computer with internet access and Microsoft Excel with the Analysis Toolpak add-in activated (please note that if you have a Mac, the add-in is a bit more complicated; see the link on Blackboard under Resources). All computers in the student computer labs on campus contain the hardware and software that you will need for this course. In addition, if you have a laptop, it would be beneficial to bring it with you to class.

**PollEverywhere:** We will be using an online site called PollEverywhere for in-class quizzes. Responses to polls can be submitted via text message or a URL using a smartphone or laptop browser. You will need to create an account so that your participation can be recorded; please see the instructions on Blackboard. If you do not have a cell phone with text messaging capability nor a laptop that you can bring to class regularly, let me know ASAP.

**Course Requirements:**
Your final grade for the course is based on several in-class quizzes, contribution to class discussions, one midterm and two major projects. The contribution of each to your final grade is as follows:

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<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Individual Readiness Assessments (iRAs)</td>
<td>10%</td>
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<tr>
<td>Individual Applications / Class participation</td>
<td>10%</td>
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<td>Midterm</td>
<td>10%</td>
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<tr>
<td>Project 1</td>
<td>20%</td>
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<td>Project 2</td>
<td>25%</td>
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<td>Team Applications</td>
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<td>Team Readiness Assessments (tRAs)</td>
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I reserve the right to make adjustments if circumstances require but this rarely happens and you would be given plenty of advance notice. Final semester letter grades will be based on a traditional grading scale (e.g., 95-100% = A, 90-95% = A-, 87-90% = B+, 83-87% = B, etc.). If I decide that a curve is justified, it will be applied at the end of the semester.
**Team-based learning:**
We will be using a learning strategy known as ‘team-based learning’ (TBL); the majority of the work in this class will be done in teams that will be established at the beginning of the semester.

**How does TBL work?** You will spend most of your time working in teams, applying what you’ve learned from outside readings (and your own review of statistics). The course is divided into several units where each unit lasts a few weeks and follows the same structure:

1. Students read the assigned material for the unit. This will generally be readings in the Greenlaw and Klass books. There will be reading guides provided that are a series of questions that you should be able to answer by the time you come to class.
2. At the beginning of each unit, students will take an “individual Readiness Assessment” (iRA) in class to be sure that they have sufficient knowledge to work problems from this unit. Questions will primarily be over definitions or will be simple applications of facts and definitions. These will be multiple-choice (you will need scantron forms) and will be graded.
3. Immediately following the iRA, students will answer the same questions as a team, with a “team Readiness Assessment” (tRA). This too will be graded. All team members receive the team score.
4. Disputes over missed questions on the tRA can be appealed to the instructor. The appeal must come from the team, it must be written, and it must come no later than the beginning of the next class (detailed instructions for appeals will be distributed later and are posted on Blackboard). All affected students on the team will have their scores changed.
5. The instructor will address common errors on the RA to the class as a whole.
6. Over the following classes, teams solve real-world problems and answer questions that economists must answer as they do their work. Team Applications generally pose a question and ask each team to make a decision. Your team will need to poll each member, listen to each member’s ideas and their explanation of why their idea is the best, and then reach a team consensus. At the end of your deliberation, all of the teams will simultaneously report decisions. Then we’ll discuss the question as a class. Any member of your team may be called upon to explain your team’s response and points may be awarded to the team based on these responses. Several of the Applications also have an individual component that must be completed prior to coming to class. These assignments will involve reading chapters in the Maier book, or articles by other economists, and answering some questions, and/or getting data and doing something with it. That information will then be used to have deeper discussions and make better decisions with your team. In general, you can expect to have something ‘due’ almost every class.
7. At the end of the semester, students complete a confidential evaluation of their teammates, based on their participation in team activities (Did they come to class regularly? Were they prepared for the day’s activity? Did they contribute productively to the team? Respect others’ ideas?). There is a copy of the Peer Evaluation form on Blackboard; note that you will have to distinguish between your teammates. The peer evaluations will be used to weight the Team portion of your grade.

We’ll form teams during the second class meeting. It’s my job to make the teams as diverse as possible, so I’ll collect some information from you on the first day that will help us form successful teams. You may not choose your own team and once teams are formed, they will only be changed under extreme circumstances.
Why TBL?
I chose to use team-based learning for this course because a) this course requires students to think through how to use data and then to actually use data, neither of which happens during a traditional lecture where I talk at you for 75 minutes, and b) this approach fits with my general teaching philosophy that in order to learn economics, students must do economics. Specifically, my philosophy is based on the following:

1) Scholars of education often talk about ‘stages’ of learning and cognitive development. These stages progress from the relatively basic level where you simply acquire information (facts, concepts) to the more complex levels where you use that information in new ways and apply it to unfamiliar situations (including evaluating what pieces of information are most useful in different situations), to the most advanced levels where you are able to create new information and develop the skills to go through this process repeatedly on your own (sometimes referred to as ‘lifelong learning skills’). The basic stages of learning are the easiest for students to master on their own so my comparative advantage as a teacher is clearly in helping you apply and create knowledge.

2) In order to move to the higher levels of cognitive development, students must take an active role. You will never learn to think like economists if you don’t actually practice thinking like economists. It certainly can help to have someone else model that thinking for you, and part of my job is to explain, clarify and guide you through this practice. But you can’t learn to play an instrument just from listening to someone else play and you can’t learn to think and create just by listening to someone else’s thinking.

3) Commitment to your own learning is not just important for success in this class; it is critical for success later in life. You will likely be working for several decades after you graduate and the world will change in countless ways so you will have to learn many new things to be successful. In addition, many of today’s best employers aren’t so much looking for specific skills as they are looking for those you can learn on the job. Thus, a critical part of college is learning how to learn. It may well be more important than the specifics of what you learn.

4) Working with others and evaluating them is a valuable skill and one that is best honed through practice. Many jobs will require you to evaluate the work of colleagues or employees. Also, people rarely work alone and technologies are making group work more possible over greater distances. Even the most capable person can learn from others. Thus, college has a role to play in aiding your ability to work with others.

Team-based learning fits with this general philosophy because it allows me, the professor, to focus on the more challenging aspects of learning, (i.e., application and creation of knowledge) while requiring you, the student, to take a more active role in your own learning. For this course in particular, you have already acquired basic information about data and statistics in the prerequisite classes; this course is entirely about using and applying that information in order to create new analysis. Teams will facilitate this process by allowing much more discussion than would otherwise be possible in such a large class (allowing you to ‘learn how to learn’); the teams also more closely replicate the real-world environment in which you will be using these skills when you leave SDSU.

For those who may be anxious about group work, please note that a large proportion of your grade will still be based on your own performance. There are also no team papers or presentations, which tend to suffer from free-riding and coordination problems.
**Attendance and due dates:** The team nature of this class requires you to be in class and to do your part as a member of your Team. This includes completing the individual component of Applications and submitting responses to PollEverywhere questions in class. Many of these assignments will not be graded for content (only completion) and they cannot be made up. However, approximately 10% of the points will be dropped at the end of the semester so you can miss a few before it will affect your grade (it should also be noted that missing class or any assignments could reduce your ability to make useful contributions to team discussions, which may then show up in the Peer Evaluation scores).

If you must miss an individual RA, you should notify me by phone (594-5012) or email (prof.imazeki@gmail.com) as soon as possible to make other arrangements. If I have not heard from you by the time class starts (or when I get back to my office at the end of class), or if you miss more than one test, no special arrangements will be made and you will have to take a zero. If you miss a team RA, you will receive the team score for the first one missed and zeroes for any missed after that.

**Other stuff you need to know:**

**Contacting Professor Imazeki:** My office hours are listed at the top of the syllabus and you can drop by anytime during those hours – you do not need an appointment to see me during office hours. I am also an undergraduate advisor for the econ department so at the beginning and end of the semester, there may be a slight wait. If you’d like to see me outside of office hours, just send me an email and we can set up some other time to meet. I try to respond to all student emails sent to the prof.imazeki@gmail.com address within 24-hours; if that isn’t possible, you should receive an auto-reply indicating when you can expect a response. Please note that I do not check my ‘official’ SDSU account (the one at mail.sdsu.edu that is listed on the econ department’s website) nearly as regularly as my gmail account so if you want a quick response, please use the gmail address.

**You are responsible for what you learn so consider what you want to learn:** Related to the idea of life-long learning mentioned above is the idea that students should be responsible for their own learning. When you leave formal schooling, you’ll clearly be responsible, so now is a good time to start working on this important skill. This course will require you to do a substantial amount of work on your own, both in and out of class. I will not be ‘spoon-feeding’ you information; rather, I see my job as being to create assignments and a classroom environment that will challenge you to think for yourself and decide what knowledge is relevant for the problem at hand. It may be very different than what you are used to, and some students find it quite frustrating, so please consider that carefully before deciding to continue with the course.

**Opportunity costs and consequences:** Since this course largely consists of economics majors, all juniors and seniors, I expect you to understand that there are always trade-offs and every choice has an opportunity cost. I reluctantly accept that for some of you, school is not always your first priority and you will make choices that reflect that; however, I expect you to accept that there are consequences to such choices. I also expect you to understand that we live in a world of uncertainty and part of being a responsible adult includes thinking about and planning for some of that uncertainty. Thus, ‘my computer crashed’ or ‘my flight was delayed’ are not acceptable excuses for late or missed assignments. At the same time, I have built allowances into the
grading policies for some unavoidable situations so if an emergency arises, you definitely should call or email me, and other members of your team, as soon as you are aware that your performance in this class might be affected.

**Disabilities:** If you have a condition which may interfere with your ability to successfully complete this course, please contact Student Disability Services, Calpulli Center, Suite 3101 (third floor), 594-6473. I am more than happy to work with you, but an evaluation must be made by them.

**Academic misconduct:** Although I am sure this won’t apply to anyone in this class, I will state for the record that academic dishonesty of any kind will not be tolerated. Academic dishonesty includes, but is not limited to: (a) using assignments that you wrote for another class, (b) representing work done by someone else as your own (i.e., plagiarism), and (c) copying someone else’s work on an assignment, basic cheating. Please note that although you are welcome to discuss assignments with others, anything you submit must have been written by you; if two people submit identical papers, it is impossible for me to know whether both people really did the work. Please see me if you have questions.