

Experimental and Behavioral Economics
ECON 3542/HON 3515
2011 Spring Semester

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Course Web page (get to know it!):

<http://www.appstate.edu/~dickinsondl/classexpecon3542/354201.html>

(The Web page address is case sensitive, best viewed in Mozilla (or Netscape))

Required Text: Markets, Games, & Strategic Behavior, Charles A. Holt.

Important website for ready-programmed experiments:

<http://veconlab.econ.virginia.edu/admin.htm>

The goal of this course is to give students exposure to the exciting fields of experimental and behavioral economics, and to encourage the scientific inquiry necessary to design and run an experiment. I assume competence in Econ 2030 (basic microeconomics) as a prerequisite to this course. This course will provide the student with exposure to different types of economics experiments. "Behavioral" components are those that involve different (often psychological) variables that may affect behavior other than those typically considered in standard economics models.

A key component to this course will be for students to design and run their own economics experiment. A useful platform for the design of web-based experiments will be utilized in class and available for students to use in designing their own experiments as well, though you are not restricted to experiment options available on the existing platform (i.e., a paper and pencil experiment is just fine for your project if you choose to do this). Main components of the class grade are shown below:

Participation.....	15%
Student lecture day.....	15%
Exam	20%
Experiment Design proposals/presentation.....	20%
Experiment Results presentation.....	15%
Experiment Project paper.....	15%

Participation: This includes presence *and* my assessment of your contribution to daily class activities, whatever they may be.

Student lecture day: This will involve each student selecting an article from the list of eligible articles (see attached), leading classroom discussion for a partial class day (e.g., 20 minutes), and turning in a short 1-page summary of your written prepared notes leading the class that day. Note that preparation for leading discussion on a particular paper will require you to look up other relevant papers or complementary material, and this should be reflected in your written notes. Those selecting an article first will go first in the rotation of student lecture days, but selecting early also gives you first pick on the available articles (an article cannot be selected by more than one student). The goal is to have each student hopefully select an article of interest to him/her. A subset of the topics from student lectures **will** appear on the exam as well.

Exam: We will have one exam prior to Spring Break to cover basic material covered up to that point

Experiment Design proposals/presentations: Groups of up to 4 students, will be established as project groups. These groups should remain intact for the entire second half of the semester, barring exceptional circumstances. Each group will prepare a 30 minute Power Point presentation **of two separate ideas for a research experiment (ideas must be distinct)**. This will require you getting together with your group, discussing ideas (bouncing them off me), reading papers, etc. A well-developed idea/presentation for each research experiment should include a statement of the research question, a literature review that summarizes at least 3 studies related to your idea, and a description of your proposed experiment design. Because your presentation involves two separate ideas, you should allocate 15 minutes of your presentation towards each idea.

Experiment Results Presentation: After group proposals, your group will select **one** of the proposed experiments, carry-out the experiment (i.e., generate a sample of data), and present the results in a 30-minute group Power Point presentation. After proposal presentations, we will be in the second-half of the session, so your group should be ready to move on its chosen experiment shortly after your presentation and feedback from the presentation. These presentations will be at the end of the semester (but not during the final exam period)

Experiment Project paper: After group experiment projects have been completed, your final project of the session is to turn in a **10-page group research paper** resulting from your group experiment project. Format requirements are double-spaced, 12 point Times New Roman font, 1-inch margins all around, and 10 pages is net of title page and reference page. This short paper should follow the general outline of sections for a good research paper: Introduction, literature review, experimental design and predictions, results, conclusions. Note: this is only about 2 pages or less per section if you follow this basic outline for a paper, so your group will need to be concise in writing up your project. The title page should include a Title, class number, names of group members, and a 150 word (or less) abstract (see examples from papers we've read for our class for help on writing an abstract). The paper will be due during final exam week, sometime in the middle so that I am able to read through papers prior to turning in final grades. I will pre-announce the exact due date of these papers in advance.

Make-up or early exams are only allowed in the event of a valid and **documented** university excuse (and yes, I require appropriate written documentation). I strongly encourage students to ask questions on a regular basis. Saving all your questions until immediately before the exam (either because you have not made time to ask or because you did not start studying until just before the exam) will not leave you or I with adequate time to address questions or material. As I'm sure is the policy in all of your classes, I do not tolerate cheating of any sort. Cheating in my class will result in a minimum penalty of an F grade for the course (the maximum penalty is dictated by University Policy, and I believe it includes expulsion from Appalachian State University).

Below I included a brief outline of our class. You are responsible for **all** material in the chapters unless otherwise noted. This means that you should read and take seriously all material we cover, even if not covered in class explicitly. I strongly advise you to start reading all relevant textbook material *before* the complementary class day(s) covering that material (*not* after the class or just before the exam). Take responsibility for your own learning and assume that material will be included on an exam.

I encourage any student needing special accommodations for class (attendance, exams, presentation, etc.) to please see me as early as possible in the semester. Appropriate arrangements will be made for those with legitimate and documented disabilities.

CLASS OUTLINE

FIRST HALF OF SEMESTER: Basics and Markets

- Ch. 1 (overview and history)
- Human subjects concerns and responsible research conduct
- Ch. 2 (pit market)
- Ch. 3 (simple games)
- Ch. 4 (risk and decision making)
- Ch. 12 (simple bargaining)
- Ch. 14 (public goods provision)
- Ch. 19 (private value auctions)
- Ch. 30 (Bayes' rule)*
- Neuro-economics

- Student Presentation topics

*the Bayes rule experiment will be conducted throughout the semester outside of regular class time so that students will have the opportunity to wear an actigraphy device for sleep data analysis. The study of how sleep affects decisions will give you a glimpse into a unique topic within behavioral economics.

Any grade appeal (quiz, exam, or participation) in my class *must* follow this procedure....no exceptions!

Step 1) Make your appeal **in writing** (i.e., computer processor or typewritten, **not** handwritten) **no later** than the beginning of the next class meeting after I return graded material. Please be brief, but I ask that you put in enough effort to coherently describe why you think you deserve more points than you received. In the event that you find yourself unable to explain why you think more points are deserved, then it is unlikely that your appeal will be successful. (note: if I've simply added your points incorrectly, then no appeal is needed. Just come talk to me and I'll fix it on your grade sheet)

Step 2) I will look only at appeals submitted to me in writing within the specified time frame. I will determine based on your argument and my judgment of whether or not your appeal merits any additional points given to your score on that item. Submission of an appeal in no way carries an implied promise that you will receive more points, or that I will grade your next assignment easier. I will be fair to the best of my judgment in handling appeals and if you have not yet heard from me you can inquire during the next class period as to the result of your appeal.

Step 3) If you feel that the results of your appeal are unwarranted, then you are welcome to speak to the economics department head about the possibility of any further appeals procedures.

The key point is this: I think I'm fair and I'm willing to admit when I've made a mistake. On the other hand, many students informally appeal at times (translation: they complain about their grade before they've really looked at the question and why their response may actually be incorrect) based on emotion and reaction. The process of having appeals be submitted in writing not only forces you to think about the question and possible mistake you or I may have made, but it also limits the appeals to those that are likely meritorious and not frivolous.

STUDENT LECTURE PAPER LIST

(students may select their paper from the list below. I have chosen papers that are all available full-text online through the ASU library, so please review papers and topics there first. However, once you make your selection, **I will make copies for you and other students** to distribute the following class period. Selections are first-come first-serve, and a paper cannot be presented twice. Selecting early puts you early in the rotation for the student days, but selecting early also means you are more likely to get to choose the paper that best suits you. If no one selects papers within one week of our first designated student lecture day, I randomly assign papers to students and randomly assign the day on which you'll present. Some of these papers are quite rigorous and challenging to read, but I encourage you to visit with me to consult on your lecture presentation.

Economics as a "hard" (experimental) science

Smith, V., 1989. "Theory, Experiment and Economics." *Journal of Economic Perspectives*, 3(1), 151-169.

Risk and time preferences

Holt, C. and S. Laury, 2002. "Risk Aversion and Incentive Effects." *American Economic Review*, 92(5), 1644-1655.

McClure, S.M., D.I. Laibson, G. Loewenstein, and J.D. Cohen. 2004. "Separate Neural systems value immediate and delayed monetary rewards." *Science*, 306 (Oct. 15): 503-507.

Science articles often include Supporting Online Information
(access from journal's own website under "Previous Issues")

Markets

Chamberlin, E., 1948. "An Experimental Imperfect Market." *Journal of Political Economy*, 56(April), 95-108.

Gode, D.K. and S. Sunder. 1993. "Allocative Efficiency of Markets with Zero-Intelligence Traders: Market as a Partial Substitute for Individual Rationality." *Journal of Political Economy* 101(1), 119-37

Smith, V.L., G.L. Suchanek and A.W. Williams. 1988. "Bubbles, Crashes, and Endogenous Expectations in Experimental Spot Asset Markets." *Econometrica*, 56:5 (September): 1119-1151.

Game Theory

McKelvey, R.D. and T.R. Palfrey. 1992. "An Experimental Study of the Centipede Game," *Econometrica*, 60(4), 803-36.

Simple social interactions

Guth, W., R. Schmittberger and B. Schwarze. 1982. "An Experimental Analysis of Ultimatum Bargaining," *Journal of Economic Behavior and Organization* 3(4), 367-388.

Berg, J.E., J. Dickhaut and K. McCabe. 1995. "Trust, reciprocity, and social history," *Games and Economic Behavior*, 10(1): 122-142.

Fehr, E. and S. Gächter. 2000. "Cooperation and Punishment in Public Goods Experiments." *American Economic Review* 90(4): 980-94.

Auctions

Coppinger, V.M., V.L. Smith, and J.A. Titus. 1980. "Incentives and Behavior in English, Dutch and Sealed-Bid Auctions" *Economic Inquiry*, 18(1): 1-22.

Kagel, J.H. and Levin, D. 1986. "The Winner's Curse and Public Information in Common Value Auctions." *American Economic Review* 76(5): 894-920.

Field Experiments

Harrison, G. and List, J. 2004. "Field Experiments." *Journal of Economic Literature*, 42(Dec):1009-1055.

Cardenas, Juan Camilo and Carpenter, Jeffrey. 2008. "Behavioral Development Economics: Lessons from field labs in the developing world." *Journal of Development Studies*, 44(3): 337-364.

Assorted Behavioral Topics

Nagel, R. 1995. "Unraveling in Guessing Games: An Experimental Study." *American Economic Review*, 85(5): 1313-26.

Dickinson, D.L. 2006. "The chilling effect of optimism: The case of final-offer arbitration." *Journal of Socio-Economics*, 35(1): 17-30.

Camerer, C., G. Loewenstein, D. Prelec. 2005. "Neuroeconomics: How neuroscience can inform economics." *Journal of Economic Literature*, 43(1): 9-64.

Kosfeld, M. M. Heinrichs, P. Zak, U. Fischbacher, E. Fehr. 2005. "Oxytocin increases trust in humans." *Nature*, 435(7042): 673-676.
(access directly from journal *Nature* website)

Sanfey, A.G., Rilling, J.K., Aronson, J.A., Nystrom, L.E. and Cohen, J.D., 2003. "The Neural Basis of Economic Decision-Making in the Ultimatum Game." *Science*, 300(13 June), 1755-1758.
Science articles often include Supporting Online Information
(access from journal *Science* website under "Previous Issues")

Anderson, C. and D.L. Dickinson. (2010) "Bargaining and Trust: The Effects of 36hr Sleep Deprivation on Socially Interactive Decisions." *Journal of Sleep Research*, 19(March): 54-63.
(access at *Journal of Sleep Research* website under "view content online")

Charness, G. and D. Levin. 2005. "When optimal choices feel wrong: A laboratory study of Bayesian updating, complexity, and affect." *American Economic Review*, 95(4): 1300-1309.