COURSE SYLLABUS
FOR
AGRICULTURAL ECONOMICS 607
Research Methodology

Gott würfelt nicht.
— Albert Einstein

George Box has [almost] said “The only way to find out what will happen when a complex system is disturbed is to disturb the system, not merely observe it passively.” These words of caution about “natural experiments” are uncomfortably strong. Yet in today’s world we see no alternative to accepting them as, if anything, too weak.
— F. Mosteller and J. Tukey

Deep understanding means knowing, not merely how things behaved yesterday, but also how things will behave under new hypothetical circumstances .... .
— Judea Pearl

Prerequisite: Graduate standing

Purpose of Course:
To enable the M.S. and Ph.D. student to (1) become acquainted with the concept of science and scientific method as a means of gaining human knowledge, (2) define research problems, develop research problem statements with objectives and hypotheses, and specify relevant models to accomplish the objectives, (3) appreciate the need for relevance and quality of data, (4) develop skills in written scientific communication.

Evaluation of Student Performance:

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Percentage</th>
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<tr>
<td>Exams (2)</td>
<td>80%</td>
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<tr>
<td>Project Proposal</td>
<td>20%</td>
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Instructor: David A. Bessler
Office Room 373 AGLS Building
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979 845 3096

Office Hours: Tuesday and Thursday 3:30 - 4:30, or by appointment

Class Lectures: Monday, Wednesday, and Friday, 11:30 AM - 12:20 PM
Room 110 AGLS Building

Final Exam: Monday May 7 10:30 AM – 12:30 PM, Room 110 AGLS Building
Course Outline

<table>
<thead>
<tr>
<th>Approximate time in weeks</th>
<th>General Topic</th>
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<tbody>
<tr>
<td>(3)</td>
<td>1. Philosophy of science</td>
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<tr>
<td></td>
<td>a. What is science?</td>
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<td></td>
<td>b. Methods of &quot;knowing&quot;</td>
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<td>c. Causality</td>
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<td>(4)</td>
<td>2. Status of economics as a science</td>
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<tr>
<td></td>
<td>a. Why softer than natural science</td>
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<td>b. Appears harder than other social sciences</td>
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<td>c. How judge scientific status</td>
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<td>d. Controversy over the &quot;best&quot; way to knowledge</td>
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<td>e. Causality in economics</td>
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<td>3. Problems in inference from data</td>
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<td>a. Structure</td>
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<td>b. Validity</td>
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<td>4. Agricultural Economics</td>
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<td>a. Problems</td>
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<td>b. Methods</td>
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<td>c. Student presentations</td>
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<td>5. Fraud</td>
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<td>a. Evidence</td>
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<td>b. Remedies</td>
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<td>6. Communication of research findings</td>
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<td>a. Thesis</td>
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<td>b. Writing papers</td>
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Examination 1

Examination 2
Agricultural Economics 607
Reading List

1.a Philosophy of Science: Some Concepts and Problems


Einstein Revealed NOVA Video, WGBH/Boston, MA, 1996.


1.b Philosophy of Science: Some Views on Causality


2. **Status of Economics as a Science**


3. **Research Tools- An Introduction**


*The Proof*, NOVA Video, WGHB/Boston, MA, 1996.

4. **Problems in Inference from Data**


5. **Agricultural Economics**


6. **Fraud**


7. **Communication of Research Findings**

8. **Final Prayer**

Nancy Cartwright, *The Dappled World* and *A Hippocratic Oath*

9. **Graduation**


**ADA Policy Statement**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room 126 of the Koldus Building. The phone number is 845-1637.

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**Scholastic Dishonesty Statement:** Do not cheat lie or steal other people’s stuff (ideas or words). If you give them credit, they become your scholastic friend.

As commonly defined, plagiarism consists of passing off as one’s own ideas, work, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section “Scholastic Dishonesty.”

**Cheating on Examinations and Homework**

I have found graduate students cheating on examinations. **I will assign a grade of zero to any student found cheating on an exam.** This will result in a “D” or “F” as a final grade; as it is virtually impossible to recover, even a final grade of “C” from a zero on an exam. A course grade of “D” or “F” will almost surely mean you will be dropped from further graduate studies here in Agricultural Economics or any other program here at TAMU.

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As requested and stated in the following: Essential Elements for Class Syllabuses
Faculty Senate and University Curriculum Committee, Summer 2003
Fuller Bazer, September 16, 2003 per COALS UPC, Thursday, September 11, 2003