

# Sample Course Schedule

## Day 1 – Monday

9–9:15 a.m.	Welcome and Discussion of Syllabus
9:15–10 a.m.	Experiment: Oral Double Auction
10–10:30 a.m.	Lecture: <i>Personal vs. Impersonal Exchange</i>
10:30–10:45 a.m.	Break
10:45 a.m.–noon	Lecture Continued: <i>Markets and Impersonal Exchange</i>
Noon–1 p.m.	Lunch hosted by ICES
1–1:30 p.m.	Group Discussion: <i>What's Up with the Price of Beef?</i>
1:30–2:15 p.m.	Team Problem: <i>Market Performance and Efficiency</i>
2:15–2:30 p.m.	Break
2:30–3 p.m.	Solutions to Team Problem

## Day 2 – Tuesday

9–10 a.m.	Experiment: Strategic Interdependence
10–10:15 a.m.	Break
10:15–11:15 a.m.	Lecture: <i>Normal Form Game Theory</i>
11:15 a.m.–noon	Experiment: Auctions
Noon–1 p.m.	Lunch (on your own)
1–1:45 p.m.	Team Problem: <i>Bidding Strategies in Internet Auctions</i>
1:45–2 p.m.	Break
2–2:30 p.m.	Solutions to Team Problem
2:30–3 p.m.	Group Discussion: <i>Economics and Rock, Paper, Scissors</i>

## Day 3 – Wednesday

9–9:45 a.m.	Experiment: Investment Game
9:45–10 a.m.	Break
10–11 a.m.	Lecture: <i>Extensive Form Game Theory and Personal Exchange</i>
11 a.m.–noon	Experiment: Bargaining
Noon–1 p.m.	Lunch hosted by ICES
1–1:45 p.m.	Team Problem: <i>Bargaining Problems</i>
1:45–2 p.m.	Break
2–2:30 p.m.	Solutions to Team Problem
2:30–3 p.m.	Group Discussion: <i>Property Rights and Bargaining</i>

## Day 4 – Thursday

9–10 a.m.	Experiment: Group Decision Making I
10–10:15 a.m.	Break
10:15–11:15 a.m.	Lecture: <i>Public Goods</i>
11:15 a.m.–noon	Experiment: Group Decision Making II
Noon–1 p.m.	Lunch (on your own)
1–1:30 p.m.	Group Discussion: <i>Designing Institutions to Provide Public Goods</i>
1:30–2:15 p.m.	Team Problem: <i>How Do You Solve the Problem of Public Goods?</i>
2:15–2:30 p.m.	Break
2:30–3 p.m.	Solutions to Team Problem

## Day 5 – Friday

9–9:45 a.m.	Experiment: Markets for Deregulated Electric Power
9:45–10 a.m.	Break
10–11:15 a.m.	Lecture and Group Discussion: <i>Turning Off the Lights</i>
11:15–11:45 a.m.	Experiment: Asset Markets
11:45 a.m.–12:15 p.m.	Group Discussion: <i>Asset Markets and the Economy</i>
12:15–1:15 p.m.	Lunch
1:15–2 p.m.	Experiment: Trade
2–2:15 p.m.	Break
2:15–2:45 p.m.	Group Discussion: <i>The Gains (and Pains) of International Trade</i>
2:45–3 p.m.	Closing



## What Past Fellows Say About EXPERIMENTAL ECONOMICS

### What was your impression of the experimental approach to economics?

- "It seems an interesting dynamic to greater anchor economic theory to actual human behavior."
- "It's great, and it's an important step in bridging the gap to other disciplines."
- "I found it exciting and cutting edge. It shows where the future of the entire field of economics is going"

### Why would you recommend this workshop to others?

- "I enjoyed myself a great deal and learned something at the same time, which is, sadly, fairly unusual."
- "It was amazingly fun and cool. Best week of school ever."
- "I learned a lot and I earned a lot."
- "The way the workshop is taught helps you actually remember the topics you learn."

"The seminar exceeded my expectations. I knew I would learn a lot, but I didn't realize how valuable the learning from fellow students would be."

# ICES

## Interdisciplinary Center for Economic Science

### The Vernon L. Smith

## High School Workshops in EXPERIMENTAL ECONOMICS

### SUMMER 2007

Study economics in a hands-on environment using the experimental approach pioneered by Vernon L. Smith, winner of the 2002 Nobel Prize in Economic Science



In January 1956, Professor Vernon L. Smith conducted his first experiment with an introductory economics class because he believed there had to be a better way to teach economics. That experiment led him to develop a new way to teach and research economics. It became the contribution for which the George Mason University professor received the 2002 Nobel Prize in Economic Science.

In July 2001, Smith founded the Interdisciplinary Center for Economic Science (ICES) at Mason. The motto of ICES, a quote by Benjamin Franklin, sums up the experimental approach to learning economics: "Tell me and I forget. Teach me and I remember. Involve me and I learn."

## About ICES

### What Is ICES?

The Interdisciplinary Center for Economic Science (ICES) at George Mason University is a research center and laboratory specializing in experimental economics. Professor Smith moved to Mason with six colleagues to found the center in 2001. It is located at Mason's Arlington, Virginia, Campus.

In addition to conducting an international research program, ICES faculty teach courses to undergraduate, graduate, and law students at Mason. While all ICES research employs the laboratory method of experimental economics, it additionally involves the fields of accounting, economics, finance, information systems,

engineering, psychology, neuroscience, computer science, and philosophy.

### What Is Experimental Economics?

Originally, economists focused on micro-economic theories relying heavily on static assumptions about how markets work. The fact that in natural environments markets are dynamic and operate in specialized institutional settings led Dr. Smith to look to the laboratory to determine whether these static formulations were, in fact, descriptive of their behavior and thus observable in a scientific way.

By devising and running markets and other exchange systems, and through the use of actual people, Dr. Smith established laboratory testing as a means of examining the validity of economic theories. ICES experiments, using cash-motivated students, create real-world incentives to help researchers better understand why markets and other exchange systems work the way they do.

### What Does Experimental Economics Contribute to Education?

In addition to their value in research, experimental methods are changing the way economics is taught. For many students, supply-and-demand curves can be too abstract a concept for them to grasp how markets function. Participating in an experimental market allows students to more quickly comprehend economic principles. Moreover, students gain an understanding of how market rules affect the behavior of individuals and the performance of the market as a whole.

### What Will I Do at the Experimental Economics Summer Workshop?

- Actively participate in decision making in markets and the learning process.
- Learn how to apply the scientific method to economic behavior.
- Discover that economics can be fun in a fast-paced course on the science of human behavior.
- Earn **cash** daily from your experiment decisions.

### Who Should Apply?

- Rising high school juniors and seniors
- Graduating high school seniors

### Where Will the Workshops Be Held?

- Mason's Arlington Campus
- 3300 Washington Boulevard, Suite 333E, Arlington, Virginia 22201
- Conveniently located near the Virginia Square (Orange Line) Metro stop

### What Choice of Dates Do I Have?

- June 25–29, 2007
  - July 9–13, 2007
- Students are expected to attend all five days of the workshop.*

### What Does the Daily Schedule Look Like?

- Each workshop lasts five full days.
- 9 a.m. to 3 p.m. each day
- One-hour lunch
- Morning and afternoon breaks

### What Will It Cost? What Do Fellowships Cover?

- There is a \$50 laboratory fee due upon acceptance.
- Fellowships cover materials, lunch on Monday, Wednesday, and Friday; and cash earnings from laboratory experiments.



### What Are the Objectives for the Experimental Economics Workshop?

- Expose and involve students in the foundations of economic analysis.
- Introduce students to economics as an observational science.
- Demonstrate its effectiveness as an important tool to test economic theories.
- Inform the economic debate to policy questions.
- Put knowledge to work on building solutions to specific economic problems with team involvement.
- Illustrate the workings of economic principles in market institutions and social exchange.

### What Will I Gain for a Week of Hard Work and Fun in Bringing Economic Theory to Life?

- Full fellowship status, if accepted
- Practical and real-world application of knowledge beyond any traditional introductory economics course
- Opportunities to develop friendships and contacts

### What Kinds of Topics Will Participants Encounter at the Workshop?

- Economic environments, institutions, and behavior
- Supply and demand and the meaning of cost
- Game theory and strategic behavior
- Auctions
- Personal and impersonal exchange
- Natural resource and environmental problems
- Issues in deregulating electric power

### How Do I Apply?

Students can apply online at <http://ceee.gmu.edu> (follow the link to IFREE Workshops and then to High School).

### What Is the Deadline for Applying?

Students are admitted on a competitive basis. All applications received by **April 1, 2006**, will receive consideration. After April 1, applications will be considered as space allows.

### What Is IFREE?

The International Foundation for Research in Experimental Economics (IFREE) is a nonprofit organization that is concerned with understanding exchange in all its societal forms. One purpose of IFREE is to support outreach workshops to introduce undergraduates, graduates, faculty, and high school teachers and students to the methodology of experimental economics and ideas through hands-on demonstration.

