New Course Request

Check Appropriate Boxes: Undergraduate credit [ ] Graduate credit [ ] Professional credit [ ]

1. School/Division Liberal Arts
2. Academic Subject Code Econ-E
3. Course Number 611 (must be cleared with University Enrollment Services)
4. Instructor TBA
5. Course Title Information Economics and Theories of Incentives and Contracts
   Recommended Abbreviation (Optional) Contracts and Incentives (Limited to 32 Characters including spaces)
6. First time this course is to be offered (Semester/Year): Spring 2011
7. Credit Hours: Fixed at [ ] or Variable from _______ to _______
8. Is this course to be graded S-F (only)? Yes [ ] No X [ ]
9. Is variable title approval being requested? Yes [ ] No X [ ]
10. Course description (not to exceed 50 words) for Bulletin publication: The course covers topics in the theories of incentives and contracts that study situations in which there are explicit or implicit contractual obligations. It explores the role and influence of asymmetric information in determining outcomes with special emphasis on moral hazard and adverse selection.
    Prerequisite: E521.
11. Lecture Contact Hours: Fixed at [ ] or Variable from _______ to _______
12. Non-Lecture Contact Hours: Fixed at _______ or Variable from _______ to _______
13. Estimated enrollment: _______ of which _______ percent are expected to be graduate students.
14. Frequency of scheduling: annual Will this course be required for majors? yes
15. Justification for new course: Required for new PhD program in Economics
16. Are the necessary reading materials currently available in the appropriate library? yes
17. Please append a complete outline of the proposed course, and indicate instructor (if known), textbooks, and other materials.
18. If this course overlaps with existing courses, please explain with which courses it overlaps and whether this overlap is necessary, desirable, or unimportant
19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of the new course with existing courses or areas of strong concern, with instructions that they send comments directly to the originating Curriculum Committee. Please append a list of departments, schools, or divisions thus consulted.

Submitted by: [Signature] Date 1/15/10
Date Department Chairman/Division Director

Approved by: [Signature] Date 2/24/10
Dean
Date
Chancellor/Vice-President
Date
University Enrollment Services

After School/Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.

UPS 724
University Enrollment Services Final-White; Chancellor/Vice-President-Blue; School/Division-Yellow; Department/Division-Pink, University Enrollment Services Advance--White
SYLLABUS FOR E611

TITLE: Information Economics and Theories of Incentives and Contracts-3 credits

INSTRUCTOR: TBA

OFFICE HOURS: TBA

OFFICE NUMBER: TBA

PHONE: TBA

EMAIL: TBA

PREREQUISITES: E520 and E521 or equivalent

COURSE DESCRIPTION AND RATIONALE: The course is one of the three core Microeconomic Theory courses for Ph. D. students in Economics. The main objective of the course is to discuss topics in the Theory of Incentives and Contracts and the role and influence of asymmetric information in determining outcomes, especially in situations where there are either explicit or implicit contractual obligations. The first topics deal with the Principal-Agent Model. These models study contracts when there is Moral Hazard. Moral hazard arises when the actions of some of the agents is either costly to monitor or cannot be observed. The second set of topics deal with issues of Adverse Selection. Adverse selection issues arise when there is a lack of information about the type of the agent. In such situations an offer meant for one type of agent may be taken up by a different type of agent leading to inefficiencies. Theories of Adverse Selection study how offers can be designed so as to mitigate the effects of adverse selection. The final set of topics in the course cover general issues related to information economics that lead to both moral hazard and adverse selection. These include mechanism design and implementation theory with applications to market signaling. Applications to economics will be highlighted throughout the course.

EDUCATIONAL OBJECTIVES: The main objective of the course is to provide a thorough understanding of issues in contract theory so that students have a sophisticated understanding of potential problems and inefficiencies that can arise from incomplete information, incompatibility of incentives and institutional setups. After taking this course students should be able to identify and analyze the suitability and efficiencies of trading mechanisms, analyze how best to allow for informational asymmetries in various contexts including insurance markets, and also analyze and understand the role of institutional design in determining outcomes.

COURSE CONTENT AND OUTLINE: The course will cover the following topics in the order given.

1. Behavior under uncertainty; measures of risk aversion; the expected utility hypothesis; certainty equivalence.

1 Once it is determined who will teach the course, the instructor-specific information will be filled in.
Chapter 6 of Masciolel, Whinston and Green 2 weeks

2. The Principal-Agent model; optimal contracts; applications.
   Chapter 2 of Laffont and Martimort, Chapter 14 of Masciolel, Whinston and Green 2 weeks

3. Adverse Selection; incentive and participation constraints; applications.
   Chapter 3 of Laffont and Martimort, Chapter 13 of Masciolel, Whinston and Green 2 weeks

4. Moral Hazard; incentive and participation constraints; applications.
   Chapter 4 and Chapter 5 of Laffont and Martimort 3 weeks

5. Mixed Models of Adverse Selection and Moral Hazard; applications.
   Chapter 7 of Laffont and Martimort 2 weeks

6. Mechanism Design and Implementation; applications.
   Chapter 23 of Masciolel, Whinston and Green and Chapter 6 of Laffont and Martimort 2 weeks

7. Dynamic Models of Moral Hazard and Adverse Selection.
   Chapter 8 of Laffont and Martimort 2 weeks

Class Schedule Information: This information will be filled in by the instructor assigned to teach the course and the details will fit in with the semester during which the course is taught.

Required Texts:

Suggested Texts:

EVALUATION AND GRADING:
Grading will be based on Homework assignments, a Midterm exam, a Final exam and a short paper. The homework assignments will carry 20% of the grade, the midterm exam will carry 30% of the grade, the final exam will carry 35% of the grade and the short paper will carry 15% of the grade. The grading scale will be approximately as follows:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>above 85%</td>
</tr>
<tr>
<td>B</td>
<td>70% to 84%</td>
</tr>
<tr>
<td>C</td>
<td>60% to 69%</td>
</tr>
</tbody>
</table>

Note: A grade of C is unsatisfactory and the student will need to retake the course to earn graduate credit.
CHEATING AND PLAGIARISM
Plagiarism is the violation of academic expectations about citing and using sources. The Indiana University Code of Students Rights and Responsibilities explains in detail the penalties for plagiarism. It is also to be found at http://www.iupui.edu/code. We will follow the institutional guidelines to penalize plagiarism and cheating. The relevant sections from the Students Rights and Responsibilities are in the Appendix.

AMERICANS WITH DISABILITIES ACT:
It is a policy of Indiana University to accommodate the needs of students with disabilities. The Adaptive Educational Services (AES) provides accommodations for students with special challenges or disabilities that affect their classroom performance. Visit http://www.life.iupui.edu/aes/ for details and further information.

OTHER POLICIES:
1. Work that is submitted late without prior consultation with the faculty member teaching the course may result in penalties that could include the grade for the work not being counted. Make-up examinations are given at the discretion of the instructor.

2. Students are expected to attend classes regularly. In the case of multiple instances of a student being absent the faculty member may deduct points from the student’s overall grade in the course.

3. Students are ultimately responsible for ALL activity on their computer accounts. Please remember to logoff your account at any of the public computers. Also, do not leave your Laptop unattended.

4. Academic integrity is an important requirement of a member of the university community. While there are specific statements on cheating and plagiarism, overall academic integrity also involves respectful consideration of the opinions of other students, faculty and staff.

BIBLIOGRAPHY:

Behavior under uncertainty


Principal-Agent Models


Adverse selection models


Mechanism design and implementation


Dynamic Models


APPENDIX

Policies on Academic Misconduct

Students must follow the Code of Student Rights, Responsibilities, and Conduct (http://life.iupui.edu/rights/docs/CodeofConduct.pdf). Details consist of:

G. Academic Responsibilities & Misconduct
Academic misconduct is defined as any activity that tends to undermine the academic integrity of the institution. The university may discipline a student for academic misconduct. Academic
misconduct may involve human, hard-copy, or electronic resources. Policies of academic misconduct apply to all course-, department-, school-, and university related activities, including field trips, conferences, performances, and sports activities off-campus, exams outside of a specific course structure (such as take-home exams, entrance exams, or auditions, theses and master’s exams, and doctoral qualifying exams and dissertations), and research work outside of a specific course structure (such as lab experiments, data collection, service learning, and collaborative research projects). The faculty member may take into account the seriousness of the violation in assessing a penalty for acts of academic misconduct. The faculty member must report all cases of academic misconduct to the dean of students, or appropriate official. Academic misconduct includes, but is not limited to, the following:

1. **Cheating**
   Cheating is considered to be an attempt to use or provide unauthorized assistance, materials, information, or study aids in any form and in any academic exercise or environment.
   a. A student must not use external assistance on any “in-class” or “take-home” examination, unless the instructor specifically has authorized external assistance. This prohibition includes, but is not limited to, the use of tutors, books, notes, calculators, computers, and wireless communication devices.
   b. A student must not use another person as a substitute in the taking of an examination or quiz, nor allow other persons to conduct research or to prepare work, without advance authorization from the instructor to whom the work is being submitted.
   c. A student must not use materials from a commercial term paper company; files of papers prepared by other persons, or submit documents found on the Internet. A student must not collaborate with other persons on a particular project and submit a copy of a written report that is represented explicitly or implicitly as the student’s individual work.
   d. A student must not use any unauthorized assistance in a laboratory, at a computer terminal, or on fieldwork.
   e. A student must not steal examinations or other course materials, including but not limited to, physical copies and photographic or electronic images.
   f. A student must not submit substantial portions of the same academic work for credit or honors more than once without permission of the instructor or program to whom he work is being submitted.
   g. A student must not, without authorization, alter a grade or score in any way, nor alter answers on a returned exam or assignment for credit.

2. **Fabrication**
   A student must not falsify or invent any information or data in an academic exercise including, but not limited to, records or reports, laboratory results, and citation to the sources of information.

3. **Plagiarism**
   Plagiarism is defined as presenting someone else’s work, including the work of other students, as one’s own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. What is considered “common knowledge” may differ from course to course.
   a. A student must not adopt or reproduce ideas, opinions, theories, formulas, graphics, or pictures of another person without acknowledgment.
   b. A student must give credit to the originality of others and acknowledge indebtedness whenever:
      1. Directly quoting another person’s actual words, whether oral or written;
      2. Using another person’s ideas, opinions, or theories;
      3. Paraphrasing the words, ideas, opinions, or theories of others, whether oral or written;
      4. Borrowing facts, statistics, or illustrative material; or
      5. Offering materials assembled or collected by others in the form of projects or
collections without acknowledgment.

4. Interference
A student must not steal, change, destroy, or impede another student’s work, nor should the student unjustly attempt, through a bribe, a promise of favors or threats, to affect any student’s grade or the evaluation of academic performance. Impeding another student’s work includes, but is not limited to, the theft, defacement, or mutilation of resources so as to deprive others of the information they contain.

5. Violation of Course Rules
A student must not violate course rules established by a department, the course syllabus, verbal or written instructions, or the course materials that are rationally related to the content of the course or to the enhancement of the learning process in the course.

6. Facilitating Academic Dishonesty
A student must not intentionally or knowingly help or attempt to help another student to commit an act of academic misconduct, nor allow another student to use his or her work or resources to commit an act of misconduct.