



JOHN CABOT UNIVERSITY

COURSE CODE: "EC 328"
COURSE NAME: "Economics of Information"
SEMESTER & YEAR: Spring 2018

SYLLABUS

INSTRUCTOR: Francesco Ruscitti
EMAIL: fruscitti@johncabot.edu
HOURS: MW 3:00-4:15 PM
TOTAL NO. OF CONTACT HOURS: 45
CREDITS: 3

PREREQUISITES: Prerequisite: EC 301; Recommended: MA 208
OFFICE HOURS: Before class (whenever possible) and by appointment. To make an appointment, just approach me in class or send me an email ahead of time.

COURSE DESCRIPTION:

This course examines incentive mechanisms at work in a wide range of environments to see if and how coordination can be achieved by informing and motivating individual decision makers. It also examines the performance of agents hired to carry out specific tasks, from taxi drivers, employees, to CEOs. Students will be introduced to a range of economic tools used to study models that explicitly involve contracting in economics and finance under imperfect and asymmetric information. The methods developed can be employed to investigate the performance of various institutions (e.g., voting schemes) to see if they enhance general well-being. Techniques studied include agency theory and signaling models. In addition, some applications of the tools will be covered (e.g., labor market, credit market and insurance markets).

SUMMARY OF COURSE CONTENT:

Note: This is a preliminary draft of the syllabus. Later, I will hand out and post the official version of the syllabus (much more detailed than this draft) including all of the policies and the exact exam dates.

Note: Knowledge of intermediate microeconomics and calculus is indispensable for this course; hence, it will be assumed. Moreover, basic statistics may be used throughout the course.

A basic knowledge of Economics of information is a fundamental component of the tool kit of any economist and finance professional. This course is appealing to both Economics and Finance students, especially those ones who plan on pursuing graduate programs in Economics or Finance. This is a theoretical course and the material covered is intellectually challenging and stimulating. Yet, the theory developed is applicable to many contexts. This course provides an introduction to a variety of issues that fall under the general heading of the economics of information and uncertainty. In this class, we will study the equilibrium and efficiency properties of markets in which there are information frictions, in the sense that market participants have limited information regarding the quality and price of various goods. This course introduces students to a range of economic tools and concepts used to study models explicitly involving economic agents with incomplete and asymmetric information. Consider a situation in which two (or more) agents are involved in a mutual agreement. It is very often the case that one economic agent has more information than the other about a characteristic that is relevant to the agreement. In this course, we will study how agents deal with this information asymmetry by designing incentives and embedding them in contracts. We will show that realistic information frictions can provide a simple and natural explanation for credit rationing, wage inequality, as well as for other phenomena that cannot be understood if there is full information. Moreover, we will show that, once information frictions are taken into account, the market allocation need not be efficient and appropriate government interventions (or market responses) may lead to welfare gains.

Summary: Adverse selection (hidden type models) and market responses to adverse selection: signalling, screening. Moral hazard (hidden action models) and incentive contracting (principal-agent models). Applications of the theory include market for insurance, labor market, credit market and credit rationing, price discrimination. Applications of the principal-agent model include the employer-employee relationship, the owner-manager relationship, medical doctor-patient relationship, and many other everyday life situations (asymmetric information is pervasive).

LEARNING OUTCOMES:

Firstly, the objective is that students develop analytical skills and learn to work with simple yet formal economic models. Students will develop the ability to model simple economic phenomena using elementary math. In addition,

- Students will learn to formalize and analyze models involving asymmetric information and to use these models to explain a variety of economic phenomena that cannot be understood using full information models.
Students will learn to formalize and analyze realistic, incompletely specified problems of the sort that confront consultants, managers, policy makers, entrepreneurs and others.

TEXTBOOK:

Table with 6 columns: Book Title, Author, Publisher, ISBN number, Library Call Number, Comments. Row 1: Incentives: Motivation and the Economics of Information, 2nd Edition, 2006, Donald E. Campbell, Cambridge University Press, ISBN: 9780521539746

REQUIRED RESERVED READING:

NONE

RECOMMENDED RESERVED READING:

NONE

GRADING POLICY

-ASSESSMENT METHODS:

Table with 3 columns: Assignment, Guidelines, Weight. Rows: Midterm exam 1 (18%), Midterm exam 2 (34%), Final exam (48%)

-ASSESSMENT CRITERIA:

A Work of this quality directly addresses the question or problem raised and provides a coherent argument displaying an extensive knowledge of relevant information or content. This type of work demonstrates the ability to critically evaluate concepts and theory and has an element of novelty and originality. There is clear evidence of a significant amount of reading beyond that required for the course. 93-100: A 90-92.99: A-

B This is highly competent level of performance and directly addresses the question or problem raised. There is a demonstration of some ability to critically evaluate theory and concepts and relate them to practice. Discussions reflect the student's own arguments and are not simply a repetition of standard lecture and reference material. The work does not suffer from any major errors or omissions and provides evidence of reading beyond the required assignments. 86-89.99: B+ 83-85.99: B 80-82.99: B-

C This is an acceptable level of performance and provides answers that are clear but limited, reflecting the information offered in the lectures and reference readings. 75-79.99: C+ 70-74.99: C 65-69.99: C-

D This level of performances demonstrates that the student lacks a coherent grasp of the material. Important information is omitted and irrelevant points included. In effect, the student has barely done enough to persuade the instructor that s/he should not fail. 60-64.99: D+ 55-59.99: D 50-54.99: D-

F This work fails to show any knowledge or understanding of the issues raised in the question. Most of the material in the answer is irrelevant. Below 50: F

-ATTENDANCE REQUIREMENTS:

Given the nature of the subject matter, the aim of the course, since the course readings will be based mainly on journal articles (and lecture notes posted by the instructor) and the Professor's lectures, if you do not attend classes, you get lost and struggle. Therefore, I will take attendance.

EXAMS AND POLICY ON ABSENCES: At the beginning of the semester, I will post on MyJCU and circulate the official version of the syllabus with the exact exam dates. There are NO make-up for missed exams. If, for any compelling reasons (e.g., you are sick), you happen to miss a midterm exam, I want you to notify me ahead of time (if possible) and I would surely ask you to provide me with a formal and valid justification for the absence (you have to prove your claim about the cause of the absence). If I deem the justification is formal and merits consideration, then I would let you take a make-up exam.

ACADEMIC HONESTY

As stated in the university catalog, any student who commits an act of academic dishonesty will receive a failing grade on the work in which the dishonesty occurred. In addition, acts of academic dishonesty, irrespective of the weight of the assignment, may result in the student receiving a failing grade in the course. Instances of academic dishonesty will be reported to the Dean of Academic Affairs. A student who is reported twice for academic dishonesty is subject to summary dismissal from the University. In such a case, the Academic Council will

then make a recommendation to the President, who will make the final decision.

STUDENTS WITH LEARNING OR OTHER DISABILITIES

John Cabot University does not discriminate on the basis of disability or handicap. Students with approved accommodations must inform their professors at the beginning of the term. Please see the website for the complete policy.

SCHEDULE

TOPICS AND TENTATIVE SCHEDULE

(Please note that the list and schedule of the topics mentioned below might be subject to change. More details will be provided in class)

Weeks	Topics	Reading Assignment	Exam dates and topics covered (TBA)
	KNOWLEDGE, INFORMATION AND ALLOCATION OF RESOURCES		
1	Equilibrium, asymmetric information, and efficiency.	Chapters 1 and 2 of Donald E. Campbell, 2006. Based also on F. A. Hayek, "The use of knowledge in society", 1945.	
	BASIC MODELS, TOOLS, AND ADVERSE SELECTION		
2, 3 and 4	Lagrangian multipliers, quasi-linear preferences, decision making under uncertainty and Akerlof's market for "lemons"	Hidden characteristics and the used-car market (chapters 2 and 5 of Donald E. Campbell, 2006). Based also on George A. Akerlof, "The market for "lemons", 1970	
	SIGNALING		
5, 6	Signaling	Hidden characteristics and job market signaling (chapters 2 and 5 of Donald E. Campbell, 2006). Based also on M. Spence, "Job market signaling", 1973.	
	CREDIT RATIONING		
7 and 8	Hidden action, hidden characteristics and the credit market	Hidden action and characteristics and credit rationing (chapters 3 and 5 of Donald E. Campbell, 2006). Based also on J. E. Stiglitz, and A. Weiss, "Credit rationing in markets with imperfect information", 1981.	
	SCREENING AND INSURANCE		
9 and 10	Uncertainty, demand for insurance and Insurance Markets	Hidden action and characteristics and insurance (chapters 2, 3 and 5 of Donald E. Campbell, 2006). Based also on M. Rothschild, J. Stiglitz, "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information", 1976.	
	MORAL HAZARD AND INCENTIVE CONTRACTING (OPTIMAL CONTRACTS)		
11, 12 and 13	Agency theory with observable and unobservable effort and relative applications	Basic tools, hidden action and agency theory with applications to corporate governance (chapters 2, 3 and 4 of Donald E. Campbell, 2006). Based also on D. Levinthal, "A survey of agency models of organizations", 1988.	
14	Additional topics on agency theory		
			Final exam (comprehensive): see the university schedule for date and time.