
AREC/ECON 706: MICROECONOMIC ANALYSIS II

INSTRUCTOR INFORMATION

Instructor: Stephan Kroll

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Office Hours: By appointment.

Communication Policy: Responses to email inquiries and appointment requests will be provided within 36 hours.

PREREQUISITES FOR COURSE

AREC/Econ 606 or special permission by instructor.

COURSE DESCRIPTION & OBJECTIVES

Catalog description: and primary objectives: Advanced topics in microeconomic theory: game theory; market imperfections; auction theory; adverse selection; principal-agent problems; social choice theory; incentives and market design, etc.

Upon the completion of this course, students will be able to:

CO1: Identify Types of Games

CO2: Model Real-World Situations Games to

CO3: Identify Types of Equilibrium Concepts

CO4: Solve for Equilibria of Games

CO5: Predict Behavior in Real-World Situations

CO6: Compare Predicted Equilibrium Behavior with Socially Optimal Behavior

CO7: Recognize Incentive Structures in Situations with Asymmetric Information

CO8: Recognize Different Auction Types

CO9: Solve for Equilibria in Auctions and Auction-like Market Interactions

TEXTBOOK / COURSE READINGS

- Gibbons: Game Theory for Applied Economists, 1992 (Required)
- G.A. Jehle and P.J. Reny: Advanced Microeconomic Theory, 3rd ed., 2011 (Required)
- Krishna: Auction Theory, 2nd ed., 2010 (Chapters 1-5) (Recommended, can be found as eBook on the CSU library website)
- Mas-Colell, M.D. Whinston, and J.R. Green: Microeconomic Theory, 1995 (Recommended)
Other papers and book chapters will be posted on Canvas

COURSE MATERIALS & EQUIPMENT

N/A

COURSE POLICIES

Please submit all assignments by the due date. Late submissions within 24 hours will lose 10%, 24-48 hours 20%, etc. Exams cannot be made up.

GRADING POLICY

90-100 A 85-89.95 A-
80-84.95 B+ 75-79.95 B
70-74.95 B <70 C range or lower

ASSIGNMENT	GRADE PERCENTAGE
4-8 HW sets	40%
Midterm Exam	30%
Final Exam	30%
Total:	100 %

*Keep a copy of all work created for the course, including work submitted through Canvas course learning management system.

ACADEMIC INTEGRITY & CSU HONOR PLEDGE

This course will adhere to the CSU [Academic Integrity/Misconduct](#) policy as found in the General Catalog and the [Student Conduct Code](#).

Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community. Because academic integrity, and the personal and social integrity of which academic integrity is an integral part, is so central to our mission as students, teachers, scholars, and citizens, I will ask that you affirm the CSU Honor Pledge as part of completing your work in this course.

Further information about Academic Integrity is available at CSU's [Academic Integrity - Student Resources](#).

UNIVERSAL DESIGN FOR LEARNING/ACCOMMODATION OF NEEDS

I am committed to the principle of universal learning. This means that our classroom, our virtual spaces, our practices, and our interactions be as inclusive as possible. Mutual respect, civility, and the ability to listen and observe others carefully are crucial to universal learning.

If you are a student who will need accommodations in this class, please contact me to discuss your individual needs. Any accommodation must be discussed in a timely manner. A verifying memo from [The Student Disability Center](#) may be required before any accommodation is provided.

The Student Disability Center (SDC) has the authority to verify and confirm the eligibility of students with disabilities for the majority of accommodations. While some accommodations may be provided by other departments, a student is not automatically eligible for those accommodations unless their disability can be verified and the need for the accommodation confirmed, either through SDC or through acceptable means defined by the particular department. Faculty and staff may consult with the SDC staff whenever there is doubt as to the appropriateness of an accommodative request by a student with a disability.

The goal of SDC is to normalize disability as part of the culture of diversity at Colorado State University. The characteristic of having a disability simply provides the basis of the support that is available to students. The goal is to ensure students with disabilities have the opportunity to be as successful as they have the capability to be.

Support and services are offered to student with functional limitations due to visual, hearing, learning, or mobility disabilities as well as to students who have specific physical or mental health conditions due to epilepsy, diabetes, asthma, AIDS, psychiatric diagnoses, etc. Students who are temporarily disabled are also eligible for support and assistance.

Any student who is enrolled at CSU, and who self-identifies with SDC as having a disability, is eligible for support from SDC. Specific accommodations are determined individually for each student and must be supported by appropriate documentation and/or evaluation of needs consistent with a particular type of disability. SDC reserves the right to ask for any appropriate documentation of disability in order to determine a student's eligibility for accommodations as well as in support for specific accommodative requests. The accommodative process begins once a student meets with an accommodations specialist in the SDC.

THIRD-PARTY TOOLS/PRIVACY

Please note that this course may require you to use third-party tools (tools outside of the Canvas learning management system), such as Skype and others. Some of these tools may collect and share information about their users. Because your privacy is important, you are encouraged to consult the privacy policies for any third-party tools in this course so that you are aware of how your personal information is collected, used and shared.

COPYRIGHTED COURSE MATERIALS

Please do not share material from this course in online, print, or other media. Course material is the property of the instructor who developed the course. Materials authored by third parties and used in the course are also subject to copyright protections. Posting course materials on external sites (commercial or not) violates both copyright law and the CSU Student Conduct Code. Students who share course content without the instructor's express permission, including with online sites that post materials to sell to other students, could face appropriate disciplinary or legal action.

UNDOCUMENTED STUDENT SUPPORT

Any CSU student who faces challenges or hardships due to their legal status in the United States and believes that it may impact their academic performance in this course is encouraged to visit [Student Support Services for Undocumented, DACA & ASSET](#) for resources and support. Additionally, only if you feel comfortable, please notify your professor so they may pass along any additional resources they may possess.

TITLE IX/INTERPERSONAL VIOLENCE

For the full statement regarding role and responsibilities about reporting harassment, sexual harassment, sexual misconduct, domestic violence, dating violence, stalking, and the retaliation policy please go to: [Title IX – Sexual Assault, Sexual Violence, Sexual Harassment](#).

If you feel that your rights have been compromised at CSU, several resources are available to assist:

- Student Resolution Center, 200 Lory Student Center, 491-7165
- Office of Equal Opportunity, 101 Student Services, 491-5836

A note about interpersonal violence: If you or someone you know has experienced sexual assault, relationship violence and/or stalking, know that you are not alone. As instructors, we are required by law to notify university officials about disclosures related to interpersonal violence. Confidential victim advocates are available 24 hours a day, 365 days a year to provide support related to the emotional, physical, physiological and legal aftermath of interpersonal violence. Contact the Victim Assistance Team at: 970-492-4242.

RELIGIOUS OBSERVANCES

CSU does not discriminate on the basis of religion. Reasonable accommodation should be made to allow individuals to observe their established religious holidays. Students seeking an exemption from attending class or completing assigned course work for a religious holiday will need to fill out the [Religious Accommodation Request Form](#) and turn it in to the Division of Student Affairs, located on the second level of the Administration building.

Once turned in, the Division of Student Affairs will review the request and contact the student accordingly. If approved, the student will receive a memo from the Dean of Students to give to their professor or course instructor.

Students are asked to turn in the request forms as soon as the conflict is noticed. Similarly, unanticipated conflicts requiring a religious observance, such as a death in the family, can also be reviewed.

CSU PRINCIPLES OF COMMUNITY

Inclusion: We create and nurture inclusive environments and welcome, value and affirm all members of our community, including their various identities, skills, ideas, talents and contributions.

Integrity: We are accountable for our actions and will act ethically and honestly in all our interactions.

Respect: We honor the inherent dignity of all people within an environment where we are committed to freedom of expression, critical discourse, and the advancement of knowledge.

Service: We are responsible, individually and collectively, to give of our time, talents, and resources to promote the well-being of each other and the development of our local, regional, and global communities.

Social Justice: We have the right to be treated and the responsibility to treat others with fairness and equity, the duty to challenge prejudice, and to uphold the laws, policies and procedures that promote justice in all respects.

DIVERSITY AND INCLUSION

The [Mission, Vision, and Focus](#) webpage of the Vice President for Diversity includes a comprehensive statement of CSU's commitment to diversity and inclusion.

COVID 19

Important information for Students: All students should fill out a student-specific symptom checker each day before coming to class (<https://covidrecovery.colostate.edu/daily-symptom-checker/>). In addition, please utilize the symptom checker to report symptoms, if you have a positive test, or exposed to a known COVID contact. If you know or believe you have been exposed or are symptomatic, it is important for the health of yourself and others that you report it through this checker. You will not be in trouble or penalized in any way for reporting. If you report symptoms or a positive test, you will receive immediate instructions on what to do and CSU's Public Health Office will be notified. Once notified, that office will contact you and most likely conduct contact tracing, initiate any necessary public health requirements and/or recommendations and notify you if you need to take any steps. For the latest information about the University's response, please visit the **CSU COVID-19 site** (<https://covidrecovery.colostate.edu/>).

(tentative) Course Outline:

		Gibbons	Jehle/Reny
Week 1	Introduction		
Weeks 2-3	Game Theory: Static/Complete	1	7
Week 3-4	Dynamic/Complete	2	7
Week 5	Cournot v. Bertrand v. Stackelberg v. Monopoly; Oligopoly with capacity constraints and other IO applications of game theory	Papers, parts of Gibbons and J/R 4	
Week 6	Static/Incomplete	3	7
Weeks 7-8	Dynamic/Incomplete	4	7
Thursday, October 22	Midterm Exam		
Week 10	Game Theory: Ten Treasures and Ten Intuitive Contradictions	Paper	
Week 11-13	Auctions, Incentives and Mechanism Design	Parts of Gibbons, first chapters in Krishna, additional papers	9
Weeks 13-15	(2-3 topics, depending on student interest): Either Externalities and Public Goods or Adverse Selection and Principal Agent or Social Choice Theory and Welfare Functions or... (last two weeks will be online)	Papers and/or chapters in J/R	
Wednesday, December 16, 6:20-8:20pm	Final Exam		