# **Economics**

### **Bachelor of Arts (BA)**

The Department of Economics is home to over 1200 undergraduate students. Economics majors can enroll in a broad array of economics courses, ranging from economic history to advanced macroeconomics. Students are encouraged to study abroad, participate in research, and take advantage of the many opportunities Berkeley has to offer.

### **Declaring the Major**

As an impacted major with a highly competitive admissions process, the economics major is capped. Students who want to apply to the economics major must have completed or be currently enrolled in all the major prerequisites. After fall 2004, students admitted to Berkeley as freshmen must apply by their fifth semester of post-high school coursework unless they have fewer than 80 total units. This total includes coursework in progress but excludes high school enrichment units, e.g., Advanced Placement, International Baccalaureate, or other college units earned prior to high school graduation. Transfer students admitted to Berkeley in fall 2006 and later are required to enroll in missing prerequisites and apply to the major during their first semester at Berkeley. The unit cap does not apply to transfer students.

For more information, please visit the department's website. (https://www.econ.berkeley.edu/undergrad/prospective)

## **Honors Program**

Students interested in graduating with honors in economics should consult with a faculty adviser no later than the first semester of their senior year. The department recommends a student for graduation with honors based on evidence of superior performance provided by a thesis written in the senior year and the student's course grade record overall and in the major. The minimum major grade point average (GPA) requirement is 3.5 in upper division economics courses and 3.3 GPA overall. The senior thesis may be an extension of a seminar paper prepared under the continued guidance of a faculty member through enrollment in ECON H195A/ECON H195B.

#### Minor Program

There is no minor program in economics.

In addition to the University, campus, and college requirements, listed on the College Requirements tab, students must fulfill the below requirements specific to their major program.

#### **General Guidelines**

- All courses taken to fulfill the major requirements below must be taken for graded credit, other than courses listed which are offered on a Pass/No Pass basis only. Other exceptions to this requirement are noted as applicable.
- No more than one upper division course may be used to simultaneously fulfill requirements for a student's major and minor programs, with the exception of minors offered outside of the College of Letters & Science.
- A minimum grade point average (GPA) of 2.0 must be maintained in both upper and lower division courses used to fulfill the major requirements.

For information regarding residence requirements and unit requirements, please see the College Requirements tab.

### **Prerequisites**

Five courses

Select one calculus sequence from the following: 1

MATH & MAT	1A TH 1B	Calculus and Calculus				
MATH & MAT	16A TH 16B	Analytic Geometry and Calculus and Analytic Geometry and Calculus (or equilivalent)				
Select one statistics course from the following: 1						
IND EI	NG 172	Probability and Risk Analysis for Engineers				
STAT & STA		Foundations of Data Science and Probability and Mathematical Statistics in Data Science (STAT C8 and STAT 88 must be taken together for a total of 6 units to fulfill the statistics requirement.)				
STAT	20	Introduction to Probability and Statistics				
STAT	21	Introductory Probability and Statistics for Business				
STAT	131A	Introduction to Probability and Statistics for Life Scientists				
STAT	134	Concepts of Probability				
Select one of the following:						
ECON	1	Introduction to Economics				
ECON	2	Introduction to EconomicsLecture Format (or equivalent)				
Select one of the following:						
ECON	100A	Economic AnalysisMicro				
ECON	100B	Economic AnalysisMacro				
ECON	101A	Economic TheoryMicro (or equivalents)				
ECON	101B	Economic TheoryMacro				

At least one semester of the calculus/statistics requirement must be completed at UC Berkeley.

### **Upper Division Requirements**

Seven courses

Select one course from the following, to complete the sequence begun as a prerequisite:

ECON 100A	Economic AnalysisMicro				
ECON 100B	Economic AnalysisMacro				
ECON 101A	Economic TheoryMicro				
ECON 101B	Economic TheoryMacro				
Select one econometrics class from the following:					
ECON 140	Economic Statistics and Econometrics				
ECON 141	Econometric Analysis				

Select five additional upper division economics courses

Undergraduate students in the College of Letters & Science must fulfill the following requirements in addition to those required by their major program.

For detailed lists of courses that fulfill college requirements, please review the College of Letters & Sciences (http://guide.berkeley.edu/

archive/2017-18/undergraduate/colleges-schools/letters-science) page in this Guide.

# Entry Level Writing (http://writing.berkeley.edu/node/78)

All students who will enter the University of California as freshmen must demonstrate their command of the English language by fulfilling the Entry Level Writing requirement. Fulfillment of this requirement is also a prerequisite to enrollment in all reading and composition courses at UC Berkeley.

# American History and American Institutions (http://guide.berkeley.edu/archive/2017-18/undergraduate/colleges-schools/letters-science/american-history-institutions-requirement)

The American History and Institutions requirements are based on the principle that a US resident graduated from an American university, should have an understanding of the history and governmental institutions of the United States.

# American Cultures (http:// americancultures.berkeley.edu/students/ courses)

American Cultures is the one requirement that all undergraduate students at Cal need to take and pass in order to graduate. The requirement offers an exciting intellectual environment centered on the study of race, ethnicity and culture of the United States. AC courses offer students opportunities to be part of research-led, highly accomplished teaching environments, grappling with the complexity of American Culture.

### **Quantitative Reasoning**

The Quantitative Reasoning requirement is designed to ensure that students graduate with basic understanding and competency in math, statistics, or computer science. The requirement may be satisfied by exam or by taking an approved course.

### Foreign Language

The Foreign Language requirement may be satisfied by demonstrating proficiency in reading comprehension, writing, and conversation in a foreign language equivalent to the second semester college level, either by passing an exam or by completing approved course work.

# **Reading and Composition**

In order to provide a solid foundation in reading, writing, and critical thinking the College requires two semesters of lower division work in composition in sequence. Students must complete a first-level reading and composition course by the end of their second semester and a second-level course by the end of their fourth semester.

#### **Breadth Requirements**

The undergraduate breadth requirements provide Berkeley students with a rich and varied educational experience outside of their major program. As the foundation of a liberal arts education, breadth courses give students a view into the intellectual life of the University while introducing them to a multitude of perspectives and approaches to research and scholarship. Engaging students in new disciplines and with peers from other majors, the breadth experience strengthens interdisciplinary

connections and context that prepares Berkeley graduates to understand and solve the complex issues of their day.

### **Unit Requirements**

- 120 total units, including at least 60 L&S units
- Of the 120 units, 36 must be upper division units
- Of the 36 upper division units, 6 must be taken in courses offered outside your major department

### **Residence Requirements**

For units to be considered in "residence," you must be registered in courses on the Berkeley campus as a student in the College of Letters & Science. Most students automatically fulfill the residence requirement by attending classes here for four years. In general, there is no need to be concerned about this requirement, unless you go abroad for a semester or year or want to take courses at another institution or through UC Extension during your senior year. In these cases, you should make an appointment to meet an adviser to determine how you can meet the Senior Residence Requirement.

Note: Courses taken through UC Extension do not count toward residence.

### Senior Residence Requirement

After you become a senior (with 90 semester units earned toward your BA degree), you must complete at least 24 of the remaining 30 units in residence in at least two semesters. To count as residence, a semester must consist of at least 6 passed units. Intercampus Visitor, EAP, and UC Berkeley-Washington Program (UCDC) units are excluded.

You may use a Berkeley Summer Session to satisfy one semester of the Senior Residence requirement, provided that you successfully complete 6 units of course work in the Summer Session and that you have been enrolled previously in the college.

#### Modified Senior Residence Requirement

Participants in the UC Education Abroad Program (EAP) or the UC Berkeley Washington Program (UCDC) may meet a Modified Senior Residence requirement by completing 24 (excluding EAP) of their final 60 semester units in residence. At least 12 of these 24 units must be completed after you have completed 90 units.

#### Upper Division Residence Requirement

You must complete in residence a minimum of 18 units of upper division courses (excluding EAP units), 12 of which must satisfy the requirements for your major.

For more detailed information regarding the courses listed below (e.g., elective information, GPA requirements, etc.), see the College Requirements and Major Requirements tabs.

			Freshman
F	all Units	Spring Units	Summer Units
MATH 16A <sup>5</sup>	3 MATH 16B <sup>5</sup>	3 MATH 53	(optional) <sup>5</sup> 4
OR	OR		
MATH 1A	MATH 1B		
Reading and Composition A	4 Reading and C B	omposition 4	
L&S Breadth	4 ECON 1 (SBS	Breadth) 4	
Lower Division Elective	4 OR		

		ECON 2				
	Lo	ower Division Elec	tive	4		
	15			15		4
						Sophomore
F	all Units		Spring U	Inits		Summer Unit
ECON 100A	4 E	CON 100B		4 Int	ernship	
OR		OR			OR	
ECON 101A		ECON 101B		St	udy Abroad	
STAT 20 <sup>6</sup>	4 U	D Econ Elective		4		
OR	L	&S Breadth		3		
STAT 21 <sup>6</sup>	Aı	merican Cultures	Reqt	4		
L&S Breadth	4					
UD non-Econ Elective	3					
	15			15		0
						Junior
ı	all Units		Spring U	nits		Summer Unit
ECON 140		pper Division Ecolective	nomics	4 Int	ernship	
OR		pper Division Ecolective	nomics	4	OR	
ECON 141		ower or Upper Div	ision	4 St	udy Abroad	
L&S Breadth	4 L8	S Breadth		3		
L&S Breadth	4					
Upper Division Non- Economics Elective	3					
	15			15		0
						Senior
	all Units		Spring U			
Upper Division Economic Elective 7		pper Division Eco ective	nomics	4		
Lower or Upper Division Elective	4 U	pper Division Elec	tive	3		
Lower or Upper Division Elective	4	OR				
Lower or Upper Division Elective	3	ECON H195B <sup>8</sup>				
		ower or Upper Div	ision	4		
		ower or Upper Div	ision	4		
	15			15		

FCONO

Total Units: 124

- This is a sample program plan. This plan assumes that the student has completed the Entry Level Writing, American History and Institutions, Quantitative Reasoning, and Foreign Language requirements prior to admission, and does not require MATH 32.
- To declare the Economics major, students must complete all prerequisite courses and apply to the major no later than their fifth semester at Berkeley. A minimum prerequisite GPA of 3.0 is also required.
- The economics major is impacted and cannot guarantee enrollment in specific courses.
- Students are strongly advised to work with an academic adviser to determine a personal program plan. Your program plan will differ depending on previous credit received, your course schedule, and available offerings.

- MATH 53 is a prerequisite to enroll in ECON 101A. ECON 101A ECON 101B and ECON 141 (more quantitatively rigorous versions of ECON 100A, ECON 100B, and ECON 140) are recommended for students interested in research or pursuing a PhD in Economics, and require the MATH 1A-MATH 1B series as prerequisites. ECON 100A/ECON 101A and ECON 100B/ECON 101B can be taken out of order. ECON 140/ECON 141 should be taken the semester following completion of ECON 100A/ECON 101A and ECON 100B/ECON 101B.
- Statistics prerequisite should be completed no later than fall semester of 2nd year. Other options to this prerequisite are: STAT 131A, STAT 134, or IND ENG 172.
- For students intending to complete the Economics Honors Program, one approved research course can be used to fulfill both the "Research Requirement" for the Honors Program and an upper division elective. Discuss your plans for this Program with an Economics Adviser. The Economics Honors Program is optional.
- ECON H195B is the Honors Thesis Course for students intending to complete the Economics Honors Program (https://www.econ.berkeley.edu/undergrad/current/departmental-honors). Discuss your plans for this Program with an Economics Adviser. The Economics Honors Program is optional.

# **Accelerated Program Plans**

For students considering graduating in less than four years, it's important to acknowledge the reasons to undertake such a plan of study. While there are advantages to pursuing a three-year degree plan such as reducing financial burdens, they are not for everyone and do involve sacrifices; especially with respect to participating in co-curricular activities, depth of study, and summer internships, which typically lead to jobs upon graduation. All things considered, please see the tables for three and three and a half year degree options.

- 3.5 Year Plan (https://www.econ.berkeley.edu/sites/default/files/Website %203.5%20Year.pdf)
- 3 Year Plan (https://www.econ.berkeley.edu/sites/default/files/Website %203%20Year.pdf)

#### **Mission**

Economics is the study of how people make choices under conditions of scarcity and the results of those choices for society. Limited resources make tradeoffs necessary for consumers, businesses, and nations. Microeconomics studies how consumers make choices in using their time and spending their income and how businesses make choices in producing and selling goods and services. Macroeconomics studies the determination of national income and how it deviates from its potential (full employment) over the business cycle. The important outcomes for the national economy are income and how it is distributed, unemployment, inflation, economic growth, and how well financial markets and international trade are functioning. Economics is important in studying the impact of government policies, ranging from regulatory activities in individual markets to general measures for stabilizing and steering the economy at large. The effect of alternative economic policies on the welfare of the population is a core concern in economics. Undergraduates should have the following knowledge and skills when they graduate with an economics major from UC Berkeley. The Department of Economics wants their majors to have knowledge of economics principles with the skills to apply this knowledge in the following ways.

### **Learning Goals of the Major**

Critical Thinking Skills

- Apply economic analysis to evaluate everyday problems.
- · Apply economic analysis to evaluate specific policy proposals.
- Compare two or more arguments that have different conclusions to a specific issue or problem.
- · Understand the role of assumptions in arguments.

#### Quantitative Reasoning Skills

- Understand how to use empirical evidence to evaluate an economic argument.
- · Interpret statistical results.
- Conduct appropriate statistical analysis of data, and explain the statistical problems involved.
- Obtain and/or collect relevant data using specific qualitative and/or quantitative research methods.

#### Problem-Solving Skills

- · Solve problems that have clear solutions.
- Propose solutions for problems that do not have clear answers, and indicate under what conditions they may be viable solutions.

#### Specialized Knowledge and Application of Skills

 In specific content areas (fields) of economics, develop deeper critical and quantitative thinking skills, and apply problem-solving skills to complex problems.

#### Communication Skills

- Communicate effectively in written, spoken, and graphical form about specific economic issues.
- Formulate a well-organized written argument that states assumptions and hypotheses, which are supported by evidence.
- · Present an economic argument orally.

### Lifelong Learning Skills

- Possess a working knowledge of information databases (e.g., Econ Lit, Nexis-Lexis).
- Know how to locate and use primary data sources (e.g., BLS Household Survey, UN Human Development Index).
- Understand and evaluate current economic events and new economic ideas.

#### **Career Services Overview**

The UC Berkeley Career Center (https://career.berkeley.edu) prepares undergraduates, graduate students, and alumni to make informed decisions about their futures by providing comprehensive resources, programs, and counseling on career development, internships, employment, and graduate school. Whether it be through a resume critique, an alumni networking event, or an interviewing skills workshop, the Career Center is committed to help all students achieve:

- Career Clarity: providing students the opportunity to identify their career direction.
- Career Competitiveness: providing students the opportunities to enhance their marketability via real world experiences.

 Career Connections: providing students opportunities to engage with alumni and employers.

# Common Career Paths for Economics Majors Career Destinations Survey

Every year the Career Center surveys graduating seniors (https:// career.berkeley.edu/Survey/Survey) about their post-graduation plans to better understand the career outcomes of our alumni including: career fields, job titles, specific employers, entry-level salaries, and graduate/ professional school destinations. The data profiles by major provide an impressive overview of the diverse interests and achievements of recent graduates from UC Berkeley, including specific data for the Economics Department (https://career.berkeley.edu/sites/default/files/pdf/ Survey/2014Econ.pdf). (https://career.berkeley.edu/sites/default/files/pdf/ Survey/2014Econ.pdf) Each survey year includes the August, December, and May graduating cohorts for that survey year. This data is designed to provide students, alumni, and employers with critical information about where Cal students go after graduation. As expected, college major does not restrict the employment or graduate school options that Cal students pursue. With careful planning (https://career.berkeley.edu/Plan/Plan), you can develop career-related skills and experiences that can prepare you for almost any job or graduate school field.

### Sample Career Pathways

Economics majors go on to pursue a wide variety of career options including, but not limited to:

- Economics: Data collection, research analysis, forecasting, planning, consulting and policy advising roles in many industries including private sector consulting and research firms, retail, insurance, transportation, healthcare, federal, state and local government agencies, public utilities, or labor unions.
- Banking and finance: Financial analysis, commercial banking, mortgage and lending services, credit analysis, branch management, securities sales and research.
- Management: Business and industry including banks, retail stores, restaurants, hotels, healthcare, manufacturing, government and nonprofit organizations.
- Insurance: Claims, underwriting, risk management, sales, loss control, and actuarial science.
- Sales: Industrial sales, consumer product sales, financial services sales, advertising sales, ecommerce, high tech forms, media.
- Education: Teaching, research and administrative roles in colleges, universities, and secondary schools.

Visit our Connecting Majors to Careers (https://career.berkeley.edu/Infolab/Majors2Careers) resource to explore additional career paths most commonly associated with over 80 majors, including Economics (http://major.utk.tennessee.edu/major/wp-content/uploads/2011/05/economics.pdf).

### **Career and Internship Resources**

The Career Center offers a wide variety of programs and resources to support students of all majors and class levels.

 Job Search Tools (https://career.berkeley.edu/Tools/ Tools): Resume and cover letter writing, job search strategies, networking tools, interviewing skills, and more.

- Career Counseling (https://career.berkeley.edu/Info/MakeAppt): A
  wide variety of scheduled and drop-in appointment options based on
  major and topic.
- Internships (https://career.berkeley.edu/Internships/ Internships): Internship listings, search strategies, FAQs, and more.
- Career Exploration (https://career.berkeley.edu/lnfo/CareerExp):
   Resources to explore career options, identify career goals, and develop effective career plans.
- Events and Workshops (https://career.berkeley.edu/Info/ Events): Over 70 events each semester including workshops, alumni networking events, career panels, conferences, and on-campus Career Chats.
- Career Fairs and Employer Information Sessions (https:// career.berkeley.edu/Callisto/Infosession): We offer 14 career fairs each year across a variety of career fields and partner with numerous employers for on-campus information sessions.
- Graduate and Professional School (https://career.berkeley.edu/ Info/GradProf): Counseling and resources to help students research and apply for graduate and professional school including medical school (https://career.berkeley.edu/Medical/Medical) and law school (https://career.berkeley.edu/Law/Law).

\*The above services are available to all currently enrolled UC Berkeley students and members of the Career Center's Alumni Advantage (https://career.berkeley.edu/Alumni/AlumniAdv) program.

### **Student Services**

The economics student services mission is to advise our students holistically by providing a high standard of service in a supportive and collaborative environment. Professional and peer advisers work as a team to provide accurate information in a timely manner. We partner with faculty to assist students in engaging with the campus and the global economic community. We value fairness, diversity, and the important roles our students, faculty, and staff in the Department of Economics play at the University of California, Berkeley.

Please visit our website for more information about our advising services: https://www.econ.berkeley.edu/undergrad/home/advising

### **Economics**

### **ECON 1 Introduction to Economics 4 Units**

Terms offered: Fall 2018, Summer 2018 8 Week Session, Spring 2018 A survey of economics designed to give an overview of the field. Introduction to Economics: Read More [+]

**Rules & Requirements** 

**Credit Restrictions:** Students will receive no units for Economics 1 after passing Economics 2.

#### **Hours & Format**

Fall and/or spring: 15 weeks - 2 hours of lecture and 2 hours of discussion per week

**Summer:** 8 weeks - 4 hours of lecture and 4 hours of discussion per week

#### **Additional Details**

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Introduction to Economics: Read Less [-]

# **ECON 2 Introduction to Economics--Lecture Format 4 Units**

Terms offered: Spring 2018, Spring 2017, Spring 2016
The course provides a survey of economics principles and methods. It covers both microeconomics, the study of consumer choice, firm behavior, and market interaction, and macroeconomics, the study of economic growth, unemployment, and inflation. Special emphasis is placed on the application of economic tools to contemporary economic problems and policies. Economics 2 differs from Economics 1 in that it has an additional hour of lecture per week and can thus cover topics in greater depth. It is particularly appropriate for intended economics majors.

Introduction to Economics--Lecture Format: Read More [+] Rules & Requirements

**Credit Restrictions:** Students will receive no credit for 2 after taking 1; 2 units after taking 3 or Environmental Economics and Policy 1.

#### **Hours & Format**

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

#### **Additional Details**

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Introduction to Economics--Lecture Format: Read Less [-]

# **ECON C3 Introduction to Environmental Economics and Policy 4 Units**

Terms offered: Fall 2018, Spring 2018, Fall 2017

Introduction to microeconomics with emphasis on resource, agricultural, and environmental issues.

Introduction to Environmental Economics and Policy: Read More [+]

**Rules & Requirements** 

Prerequisites: Mathematics 32

Credit Restrictions: Students will receive no credit after taking

Economics 1

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of

discussion per week

Summer: 8 weeks - 6 hours of lecture and 2 hours of discussion per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Also listed as: ENVECON C1

Introduction to Environmental Economics and Policy: Read Less [-]

#### **ECON 24 Freshman Seminar 1 Unit**

Terms offered: Fall 2011, Spring 2008, Fall 2004

The Freshman Seminar Program has been designed to provide new students with the opportunity to explore an intellectual topic with a faculty member in a small seminar setting. Freshman seminars are offered in all campus departments. Topics vary from department to department and semester to semester. Enrollment limited to 15 freshman.

Freshman Seminar: Read More [+]

Rules & Requirements

Repeat rules: Course may be repeated for credit when topic changes.

Course may be repeated for credit when topic changes.

**Hours & Format** 

Fall and/or spring: 15 weeks - 1 hour of seminar per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: The grading option will be decided by the

instructor when the class is offered. Final exam required.

Freshman Seminar: Read Less [-]

### **ECON 84 Sophomore Seminar 1 or 2 Units**

Terms offered: Spring 2018, Spring 2017, Spring 2016

Sophomore seminars are small interactive courses offered by faculty members in departments all across the campus. Sophomore seminars offer opportunity for close, regular intellectual contact between faculty members and students in the crucial second year. The topics vary from department to department and semester to semester. Enrollment limited to 15 sophomores.

Sophomore Seminar: Read More [+]

**Rules & Requirements** 

Prerequisites: At discretion of instructor

Repeat rules: Course may be repeated for credit when topic changes.

Course may be repeated for credit when topic changes.

**Hours & Format** 

Fall and/or spring:

5 weeks - 3-6 hours of seminar per week 10 weeks - 1.5-3 hours of seminar per week 15 weeks - 1-2 hours of seminar per week

Summer:

6 weeks - 2.5-5 hours of seminar per week 8 weeks - 1.5-3.5 hours of seminar per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: The grading option will be decided by the

instructor when the class is offered. Final exam required.

Sophomore Seminar: Read Less [-]

# **ECON 98 Directed Group Study 1 - 4 Units**

Terms offered: Fall 2016, Fall 2015, Fall 2014

Written proposal must be approved by Department Chair. Seminars for the group study of selected topics, which will vary from year to year.

Topics may be initiated by students.

Directed Group Study: Read More [+]

Rules & Requirements

**Credit Restrictions:** Enrollment is restricted; see the Introduction to Courses and Curricula section of this catalog.

Repeat rules: Course may be repeated for credit without restriction.

**Hours & Format** 

Fall and/or spring: 15 weeks - 1-4 hours of directed group study per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

Directed Group Study: Read Less [-]

# **ECON 100A Economic Analysis--Micro 4 Units**

Terms offered: Fall 2018, Summer 2018 8 Week Session, Spring 2018 Resource allocation and price determination.

Economic Analysis--Micro: Read More [+]

**Rules & Requirements** 

**Prerequisites:** 1 or 2 or C3, or Environmental Economics and Policy 1, and Mathematics 1A or 16A, and Mathematics 1B or 16B, or equivalent

**Credit Restrictions:** Students will receive no credit for 100A after taking 101A or Undergraduate Business Administration 101A. A deficient grade in Undergraduate Business Administration 101A may be repeated by taking 100A.

#### **Hours & Format**

Fall and/or spring: 15 weeks - 3 hours of lecture and 1-2 hours of discussion per week

Summer: 8 weeks - 6 hours of lecture and 1.5-4 hours of discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Economic Analysis--Micro: Read Less [-]

# ECON 100B Economic Analysis--Macro 4 Units

Terms offered: Fall 2018, Summer 2018 8 Week Session, Spring 2018 A study of the factors which determine national income, employment, and price levels, with attention to the effects of monetary and fiscal policy. Economic Analysis--Macro: Read More [+]

**Rules & Requirements** 

Prerequisites: 1 or 2, and Mathematics 1A or 16A

**Credit Restrictions:** Students will receive no credit for 100B after taking 101B or Undergraduate Business Administration 101B. A deficient grade in Undergraduate Business Administration 101B may be repeated by taking 100B.

#### **Hours & Format**

Fall and/or spring: 15 weeks - 3-3 hours of lecture and 1-2 hours of discussion per week

**Summer:** 8 weeks - 6-6 hours of lecture and 1.5-4 hours of discussion per week

#### **Additional Details**

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Economic Analysis--Macro: Read Less [-]

# **ECON 101A Economic Theory--Micro 4 Units**

Terms offered: Fall 2018, Spring 2018, Fall 2017

Theory of resource allocation and price determination with an emphasis

on microeconomic principles.

Economic Theory--Micro: Read More [+]

**Rules & Requirements** 

Prerequisites: 1 or 2, Mathematics 53 or equivalent or consent of instructor

**Credit Restrictions:** Students will not receive credit for 101A after taking 100A or Undergraduate Business Administration 101A. A deficient grade in Undergraduate Business Administration 101A may be repeated by taking 101A.

#### **Hours & Format**

Fall and/or spring: 15 weeks - 3 hours of lecture and 1-2 hours of discussion per week

#### **Additional Details**

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Economic Theory--Micro: Read Less [-]

### **ECON 101B Economic Theory--Macro 4 Units**

Terms offered: Fall 2018, Spring 2018, Fall 2017

A study of theories of the determination of national income, employment, and price levels, with attention to the effects of monetary and fiscal policy. Economic Theory--Macro: Read More [+]

**Rules & Requirements** 

Prerequisites: 1 or 2, and Mathematics 1A and 1B

**Credit Restrictions:** Students will not receive credit for 101B after taking 100B or Undergraduate Business Administration 101B. A deficient grade in Undergraduate Business Administration 101B may be repeated by taking 101B.

#### **Hours & Format**

Fall and/or spring: 15 weeks - 3 hours of lecture and 1-2 hours of discussion per week

#### **Additional Details**

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Economic Theory--Macro: Read Less [-]

# **ECON C102 Natural Resource Economics 4 Units**

Terms offered: Fall 2018, Fall 2017, Fall 2016

Introduction to the economics of natural resources. Land and the concept of economic rent. Models of optimal depletion of nonrenewable resources and optimal use of renewable resources. Application to energy, forests, fisheries, water, and climate change. Resources, growth, and sustainability.

Natural Resource Economics: Read More [+]

**Rules & Requirements** 

Prerequisites: 100, or Economics 100A or 100B

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of

discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Sunding

Also listed as: ENVECON C102

Natural Resource Economics: Read Less [-]

# **ECON C103 Introduction to Mathematical Economics 4 Units**

Terms offered: Fall 2018, Spring 2018, Spring 2017

Selected topics illustrating the application of mathematics to economic

theory. This course is intended for upper-division students in

Mathematics, Statistics, the Physical Sciences, and Engineering, and for economics majors with adequate mathematical preparation. No economic

background is required.

Introduction to Mathematical Economics: Read More [+]

**Rules & Requirements** 

Prerequisites: Math 53 and 54

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Formerly known as: 103

Also listed as: MATH C103

Introduction to Mathematical Economics: Read Less [-]

# **ECON 104 Advanced Microeconomic Theory 4 Units**

Terms offered: Fall 2013, Spring 2013, Spring 2012

This course explores some issues in advanced microeconomic theory, with special emphasis on game-theoretic models and the theory of choice under uncertainty. Specific applications will vary from year to year, but will generally include topics from information economics and models of strategic interaction.

Advanced Microeconomic Theory: Read More [+]

**Rules & Requirements** 

Prerequisites: 101A or consent of instructor

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 0-1 hours of

discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Advanced Microeconomic Theory: Read Less [-]

# **ECON 105 History of Economic Thought 4 Units**

Terms offered: Fall 2018, Summer 2018 First 6 Week Session, Fall 2017 A survey of the theories of major economists from Adam Smith to Keynes.

History of Economic Thought: Read More [+]

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Summer:

6 weeks - 8 hours of lecture per week 8 weeks - 5.5 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

History of Economic Thought: Read Less [-]

# **ECON C110 Game Theory in the Social Sciences 4 Units**

Terms offered: Fall 2018, Fall 2017, Fall 2016

A non-technical introduction to game theory. Basic principle, and models of interaction among players, with a strong emphasis on applications to political science, economics, and other social sciences.

Game Theory in the Social Sciences: Read More [+]

**Rules & Requirements** 

Credit Restrictions: Students receive no credit for PS C135/PEIS C135/ECON C110 after taking ECON 104. If PS C135/ECON C110/PS W135/ECON N110 is taken and with a passing grade, students can't take the other versions of the course for additional credit. If PS C135/ECON C110/PS W135/ECON N110 is taken and not passed, students can take the other versions to replace grade.

Repeat rules: Course may be repeated for credit under special circumstances: PS C135/ECON C110,PS W135 and ECON N110 are similar in content. See Restriction Description.PS C135/ECON C110,PS W135 and ECON N110 are similar in content. See Restriction Description.

#### **Hours & Format**

Fall and/or spring: 15 weeks - 3-3 hours of lecture and 0-1 hours of discussion per week

#### **Additional Details**

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Also listed as: POL SCI C135

Game Theory in the Social Sciences: Read Less [-]

# ECON N110 Game Theory in the Social Sciences 4 Units

Terms offered: Summer 2017 8 Week Session, Summer 2016 10 Week Session, Summer 2016 8 Week Session

A non-technical introduction to game theory. Basic principle, and models of interaction among players, with a strong emphasis on applications to political science, economics, and other social sciences.

Game Theory in the Social Sciences: Read More [+]

**Rules & Requirements** 

**Credit Restrictions:** Students will receive no credit for Economics N110 after completing Economics 104, Political Science C135/Political Economy of Industrial Societies/Economics C110.

#### **Hours & Format**

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Summer: 8 weeks - 6 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Formerly known as: 135

Game Theory in the Social Sciences: Read Less [-]

# ECON 113 American Economic History 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2015 A survey of trends in the American economy; emphasis on factors explaining economic growth and on the changing distribution of the gains and losses associated with growth.

American Economic History: Read More [+]

**Rules & Requirements** 

Prerequisites: 1 or 2 or C3, or Environmental Economics C1

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 0-1 hours of discussion per week

**Summer:** 8 weeks - 6 hours of lecture and 0-2 hours of discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

American Economic History: Read Less [-]

# **ECON N113 American Economic History 4 Units**

Terms offered: Summer 2010 8 Week Session, Summer 2009 10 Week Session, Summer 2009 8 Week Session

A survey of trends in the American economy; emphasis on factors explaining economic growth and on the changing distribution of the gains and losses associated with growth.

American Economic History: Read More [+]

Rules & Requirements

Prerequisites: 1 or 2

**Hours & Format** 

Summer: 8 weeks - 8 hours of lecture and 0 hours of discussion per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

American Economic History: Read Less [-]

# ECON 115 The World Economy in the Twentieth Century 4 Units

Terms offered: Spring 2018, Spring 2017, Fall 2016

Development of the world economic system with particular reference to world-wide trading relationships. This course is equivalent to History 160; students will not receive credit for both courses.

The World Economy in the Twentieth Century: Read More [+]

**Rules & Requirements** 

Prerequisites: 1 or 2

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 0-1 hours of

discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

The World Economy in the Twentieth Century: Read Less [-]

# **ECON 119 Psychology and Economics 4**Units

Terms offered: Fall 2018, Summer 2018 8 Week Session, Fall 2017 This course presents psychological and experimental economics research demonstrating departures from perfect rationality, self-interest, and other classical assumptions of economics and explores ways that these departures can be mathematically modeled and incorporated into mainstream positive and normative economics. The course will focus on the behavioral evidence itself, especially on specific formal assumptions that capture the findings in a way that can be incorporated into economics. The implications of these new assumptions for theoretical and empirical economics will be explored.

Psychology and Economics: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A or 101A

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 0-1 hours of

discussion per week

Summer: 8 weeks - 6 hours of lecture and 0-2 hours of discussion per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Psychology and Economics: Read Less [-]

# **ECON 121 Industrial Organization and Public Policy 4 Units**

Terms offered: Fall 2018, Summer 2018 8 Week Session, Spring 2018 The organization and structure of production in the U.S. economy. Determinants of market structure, business behavior, and economic performance. Implications for antitrust policy.

Industrial Organization and Public Policy: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A or 101A

**Hours & Format** 

Fall and/or spring: 15 weeks - 3-3 hours of lecture and 0-1 hours of

discussion per week

Summer:

6 weeks - 8-8 hours of lecture and 0-2 hours of discussion per week 8 weeks - 6-6 hours of lecture and 0-1.5 hours of discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Industrial Organization and Public Policy: Read Less [-]

# **ECON 122 Industrial Organization Seminar 4 Units**

Terms offered: Fall 2012, Spring 2010, Spring 2009

Seminar on problems in the field of industrial organization. Seminar paper

is required.

Industrial Organization Seminar: Read More [+]

**Rules & Requirements** 

Prerequisites: 121 and/or consent of instructor

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of seminar per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Industrial Organization Seminar: Read Less [-]

# **ECON 123 Government Regulation of Industry 3 Units**

Terms offered: Fall 2014, Spring 2014, Spring 2013
Problems of public policy in the field of industrial organization. Analysis of regulatory consequences with particular attention to economic performance.

Government Regulation of Industry: Read More [+]

**Rules & Requirements** 

Prerequisites: 121

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Government Regulation of Industry: Read Less [-]

# ECON 124 Special Topics in Industrial Organization 4 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014
Analysis of market structure, conduct and performance in selected industries. See course announcement for current topics.
Special Topics in Industrial Organization: Read More [+]

Rules & Requirements

Prerequisites: 121

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Special Topics in Industrial Organization: Read Less [-]

# ECON C125 Environmental Economics 4 Units

Terms offered: Summer 2018 8 Week Session, Spring 2018, Summer 2017 8 Week Session, Spring 2017, Summer 2016

Theories of externalities and public goods applied to pollution and environmental policy. Trade-off between production and environmental amenities. Assessing nonmarket value of environmental amenities. Remediation and clean-up policies. Environment and development.

Biodiversity management.

Environmental Economics: Read More [+]

**Rules & Requirements** 

Prerequisites: 100, Mathematics 16A-16B, or Economics 100A or 101A

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of

discussion per week

Summer: 8 weeks - 6 hours of lecture and 2 hours of discussion per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Zilberman

Also listed as: ENVECON C101

Environmental Economics: Read Less [-]

### **ECON 131 Public Economics 4 Units**

Terms offered: Spring 2018, Fall 2017, Spring 2017

This course focuses on the role of the government in the economy from a theoretical and empirical perspective. The aim of the course is to provide an understanding of the reasons for government intervention in the economy, analyzing the merits of possible government policies, and the response of economic agents to the government's actions. The course covers the analysis of tax policy, social insurance programs, public goods, environmental protection, and the interaction between different levels of government. Special emphasis is set on current government policy issues such as social security reform, income tax reform, and budget deficits.

Public Economics: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A-100B or 101A-101B

**Hours & Format** 

Fall and/or spring: 15 weeks - 3-3 hours of lecture and 0-1 hours of

discussion per week

Summer:

6 weeks - 7.5-7.5 hours of lecture and 0-2.5 hours of discussion per week

8 weeks - 5.5-6 hours of lecture and 0-2 hours of discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Public Economics: Read Less [-]

# ECON 132 Seminar in Public Sector Economics 4 Units

Terms offered: Fall 2015, Fall 2014, Fall 2013 Enrollment will be limited. A seminar paper is required. Seminar in Public Sector Economics: Read More [+]

**Rules & Requirements** 

Prerequisites: 131 and/or consent of instructor

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of seminar per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Seminar in Public Sector Economics: Read Less [-]

# ECON 133 Global Inequality and Growth 4 Units

Terms offered: Summer 2018 First 6 Week Session, Spring 2018, Summer 2017 First 6 Week Session

This course provides an introduction to the analysis of economic inequalities and the interplay between inequality and economic growth. It focuses on three sets of core questions: 1) How does inequality evolve over the path of development? 2) What are the theories that can explain the degree of economic inequalities and its dynamic? 3) How do policies affect inequalities, and what types of policies can foster equitable growth? The course addresses these issues from a global and historical perspective: it comprehensively deals with the United States today, but also with inequality in China, India, Latin America, and Europe, as far back as 1700.

Global Inequality and Growth: Read More [+]

**Rules & Requirements** 

Prerequisites: Economics 1

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of

discussion per week

Summer:

6 weeks - 10 hours of lecture and 0 hours of discussion per week 8 weeks - 6 hours of lecture and 0 hours of discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Zucman

Global Inequality and Growth: Read Less [-]

# **ECON 134 Macroeconomic Policy from the Great Depression to Today 4 Units**

Terms offered: Spring 2018, Spring 2013, Spring 2012
This course will analyze the macroeconomic challenges and policy responses in the United States over the past century. Among the key topics studied are the Great Depression and the New Deal; boom and bust monetary and fiscal policy in the early post-World War II period; the Volcker disinflation and the Great Moderation; and the 2008 financial crisis and the Great Recession.

Macroeconomic Policy from the Great Depression to Today: Read More [+]

**Rules & Requirements** 

Prerequisites: 100B or 101B

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of

discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Romer

Macroeconomic Policy from the Great Depression to Today: Read Less [-]

#### **ECON 136 Financial Economics 4 Units**

Terms offered: Fall 2018, Summer 2018 8 Week Session, Spring 2018 Analysis of financial assets and institutions. The course emphasizes modern asset valuation theory and the role of financial intermediaries, and their regulation, in the financial system.

Financial Economics: Read More [+]

Rules & Requirements

Prerequisites: 100A or 101A, and one semester of statistics

**Credit Restrictions:** Students will receive no credit for 136 after taking Undergraduate Business Administration 103. Students intending on majoring in Business should not take 136.

**Hours & Format** 

Fall and/or spring: 15 weeks - 3-3 hours of lecture and 0-1 hours of discussion per week

Summer:

6 weeks - 8-8 hours of lecture and 0-2 hours of discussion per week 8 weeks - 6-6 hours of lecture and 0-2 hours of discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Financial Economics: Read Less [-]

### **ECON N136 Financial Economics 4 Units**

Terms offered: Summer 2009 10 Week Session, Summer 2009 8 Week Session, Summer 2008 8 Week Session

Analysis of financial assets and institutions. The course emphasizes modern asset valuation theory and the role of financial intermediaries, and their regulation, in the financial system.

Financial Economics: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A or 101A, and one semester of statistics

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of

discussion per week

Summer: 8 weeks - 8 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Financial Economics: Read Less [-]

# ECON 137 Aggregate Economics Seminar 4 Units

Terms offered: Spring 2007, Spring 2006, Fall 2003 Enrollment will be limited. A seminar paper is required. Aggregate Economics Seminar: Read More [+]

**Rules & Requirements** 

Prerequisites: 136 and consent of instructor

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of seminar per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Aggregate Economics Seminar: Read Less [-]

# ECON 138 Financial and Behavioral Economics 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016
This course is an advanced class in Financial Economics. Topics include moral hazard (principal-agent problems, free cash flow), asymmetric Information (security issurance, dividends), mergers and acquisitions (theory, managerial incentives), corporate governance (separation of ownership and control, internal capital markets, superstar CEOs), corporate fraud (earnings manipulations). This class emphasizes the economic underpinning of financial decision-making and is mathematically and technically demanding. You will be required to do some empirical homework using STATA.

Financial and Behavioral Economics: Read More [+]

#### **Rules & Requirements**

**Prerequisites:** 100A or 101A, and Statistics 20, 21, or 25 or any upper division statistics course

#### **Hours & Format**

Fall and/or spring: 15 weeks - 3 hours of lecture and 0-1 hours of discussion per week

#### Summer:

6 weeks - 7.5 hours of lecture and 0-2.5 hours of discussion per week 8 weeks - 6 hours of lecture and 0-1.5 hours of discussion per week

#### **Additional Details**

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Financial and Behavioral Economics: Read Less [-]

# **ECON 139 Intermediate Financial Economics 4 Units**

Terms offered: Fall 2018, Spring 2018, Fall 2017

This is a 4-unit advanced undergraduate course designed for undergraduates in Economics, Statistics, Mathematics, and Industrial Engineering/Operations Research who are interested in financial economics and finance. This course will stress the link between financial economics and equilibrium theory. Less attention will be devoted to purely financial topics such as the valuation of derivatives. This course is intended as the segue between a first course in financial economics (at the undergraduate level) and graduate-level courses in financial economics and finance.

The idea is to introduce students to the full range of topics typically covered by a financial economics and/or discrete time asset pricing course at the doctoral level.

Intermediate Financial Economics: Read More [+]

#### **Rules & Requirements**

**Prerequisites:** Students need a basic understanding of the principles of finance as well as microeconomic theory. Working knowledge of multivariable calculus, linear algebra, and probability and statistics will be assumed.<BR/>Required courses: Economics 100A/101A, Economics 136, or equivalent.<BR/>Recommended courses: Math 53, Math 54, Statistics 20, or equivalent

#### **Hours & Format**

Fall and/or spring: 15 weeks - 4-4 hours of lecture and 0-1 hours of discussion per week

#### **Additional Details**

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructors: Bianchi, Anderson

Intermediate Financial Economics: Read Less [-]

# ECON 140 Economic Statistics and Econometrics 4 Units

Terms offered: Fall 2018, Summer 2018 8 Week Session, Spring 2018 Introduction to problems of observation, estimation, and hypothesis testing in economics. This course covers the linear regression model and its application to empirical problems in economics.

Economic Statistics and Econometrics: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A-100B or 101A-101B or equivalent and Statistics 20,

21, 25, or 131A or equivalent

Credit Restrictions: Students will not receive credit for 140 after taking

141.

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1.5 hours of

discussion per week

Summer: 8 weeks - 6 hours of lecture and 3 hours of discussion per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Economic Statistics and Econometrics: Read Less [-]

### **ECON 141 Econometric Analysis 4 Units**

Terms offered: Fall 2018, Spring 2018, Fall 2017

Introduction to problems of observation, estimation, and hypothesis testing in economics. This course covers the statistical theory for the linear regression model and its variants, with examples from empirical economics.

Econometric Analysis: Read More [+]

**Rules & Requirements** 

**Prerequisites:** 100A-100B or 101A-101B or equivalent; Statistics 20, 21, 25, or 131A, or equivalent; and Mathematics 53 and 54, or equivalent

Credit Restrictions: Students will not receive credit for 141 after taking

140.

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1.5 hours of

discussion per week

Summer: 8 weeks - 4 hours of lecture and 3 hours of discussion per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Econometric Analysis: Read Less [-]

# **ECON C142 Applied Econometrics and Public Policy 4 Units**

Terms offered: Fall 2018, Spring 2018, Spring 2017, Fall 2016, Fall 2015 This course focuses on the sensible application of econometric methods to empirical problems in economics and public policy analysis. It provides background on issues that arise when analyzing non-experimental social science data and a guide for tools that are useful for empirical research. By the end of the course, students will have an understanding of the types of research designs that can lead to convincing analysis and be comfortable working with large scale data sets.

Applied Econometrics and Public Policy: Read More [+]

**Rules & Requirements** 

Prerequisites: 140 or 141 or consent of instructor

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of

discussion per week

Summer: 8 weeks - 6 hours of lecture and 2 hours of discussion per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Also listed as: POL SCI C131A/PUB POL C142

Applied Econometrics and Public Policy: Read Less [-]

### **ECON 151 Labor Economics 4 Units**

Terms offered: Summer 2018 8 Week Session, Summer 2017 8 Week Session, Spring 2017

This course will analyze the economic forces that shape labor markets, institutions, and performance in the U.S., Japan, and at least one European country (usually Germany). Institutions examined include trade unions, legal regulations, and social conventions.

Labor Economics: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A or 101A, or consent of instructor

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Summer:

6 weeks - 7.5 hours of lecture per week 8 weeks - 6 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Labor Economics: Read Less [-]

# **ECON 152 Wage Theory and Policy 4 Units**

Terms offered: Spring 2018, Spring 2016, Spring 2015

This course focuses on theoretical and empirical analysis of wage and employment determination in the labor market. In addition, the role of public policy in affecting wage and employment outcomes in the U.S. labor market is examined. Topics include labor supply, labor demand, minimum wages, the economics of education and training, discrimination and the impact of antidiscrimination programs, changes in wage inequality over time, immigration, unions, unemployment, and poverty.

Wage Theory and Policy: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A or 101A

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 0-1 hours of

discussion per week

Summer: 8 weeks - 6 hours of lecture and 0-2 hours of discussion per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Wage Theory and Policy: Read Less [-]

# **ECON N152 Wage Theory and Policy 4 Units**

Terms offered: Prior to 2007

This course focuses on theoretical and empirical analysis of wage and employment determination in the labor market. In addition, the role of public policy in affecting wage and employment outcomes in the U.S. labor market is examined. Topics include labor supply, labor demand, minimum wages, the economics of education and training, discrimination and the impact of antidiscrimination programs, changes in wage inequality over time, immigration, unions, unemployment, and poverty.

Wage Theory and Policy: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A-100B or 101A-101B

**Hours & Format** 

Summer: 8 weeks - 8 hours of lecture and 0 hours of discussion per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Wage Theory and Policy: Read Less [-]

### **ECON 153 Labor Economics Seminar 4 Units**

Terms offered: Fall 2015, Fall 2014, Fall 2006 Topics in labor economics. Seminar paper required.

Labor Economics Seminar: Read More [+]

**Hours & Format** 

**Rules & Requirements** 

Fall and/or spring: 15 weeks - 3 hours of seminar per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Prerequisites: 140 or 141, and 151 or 152 and consent of instructor

Labor Economics Seminar: Read Less [-]

# ECON 154 Economics of Discrimination 4 Units

Terms offered: Spring 2018, Spring 2016, Spring 2014
Starting from Becker's classic book on the economics of discrimination,
this course will focus on issues of difference and discrimination
accociated with race, gender, or nation of birth, focusing particularly on
credit and housing markets, education, and health care. The course looks
carefully at the ways in which econometrics is used to address questions
of discrimination.

Economics of Discrimination: Read More [+]

Rules & Requirements

Prerequisites: 140 or 141

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of seminar per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Economics of Discrimination: Read Less [-]

### **ECON 155 Urban Economics 3 Units**

Terms offered: Fall 2018, Summer 2018 8 Week Session, Spring 2018 Application of economic theory to urban problems. Topics covered include location theory, housing, transportation, and the fiscal problems of city government.

Urban Economics: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A or 101A

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Summer:

6 weeks - 8 hours of lecture per week 8 weeks - 6 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Urban Economics: Read Less [-]

### **ECON 155A Cities and Public Policy 4 Units**

Terms offered: Spring 2018, Spring 2017, Spring 2016

This is an advanced course considering the economic forces governing cities and a host of attendant public policy issues. Topics covered will include theory and evidence on sources of agglomeration economies and urban growth, housing markets, segregation, neighborhood effects, and place-based policies.

Cities and Public Policy: Read More [+]

**Rules & Requirements** 

Prerequisites: Intermediate microeconomics (Economics 100A or Economics 101A) and econometrics (Economics 140 or Economics 141)

**Credit Restrictions:** Students will receive no credit for Economics 155A after taking Economics 155.

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of

discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Kline

Cities and Public Policy: Read Less [-]

### **ECON 157 Health Economics 4 Units**

Terms offered: Spring 2018, Spring 2017, Spring 2016
An economic analysis of policies and institutions in the U.S. health care sector. Topics covered include the supply and demand for health services, conceptual and policy issues relating to the provision of health insurance, and economic analysis of efficient regulatory policies toward the health care sector.

Health Economics: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A or 101A

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Summer: 8 weeks - 6 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Health Economics: Read Less [-]

# **ECON 161 Economics of Transition: Eastern Europe 4 Units**

Terms offered: Spring 2016, Spring 2015, Fall 2009

Economic behavior under socialism; socialism vs. capitalism. Transition challenges. Stylized facts of transition. Political economy of reform strategies. Liberalization and the macroeconomic environment. Privatization policies and enterprise restructuring. Legal reform, institutional change, and variation in economic performance across countries. Foreign trade and enlargement of the European Union to transition countries. The Washington consensus, transition, and the institutions of capitalism.

Economics of Transition: Eastern Europe: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A or 101A

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Summer: 8 weeks - 6 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Economics of Transition: Eastern Europe: Read Less [-]

**ECON 162 The Chinese Economy 3 Units** 

Terms offered: Fall 2018, Fall 2017, Fall 2016

The Chinese economy, its institutions, reform and transition to the

market, and development.

The Chinese Economy: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A-100B or 101A-101B

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Summer: 8 weeks - 5.5 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

The Chinese Economy: Read Less [-]

**ECON C171 Economic Development 4 Units** 

Terms offered: Fall 2018, Fall 2017, Spring 2017

Problems of underdevelopment and poverty, policy issues, and

development strategy.

Economic Development: Read More [+]

**Rules & Requirements** 

Prerequisites: 100, Economics 100A or 101A

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of

discussion per week

Summer:

6 weeks - 8 hours of lecture and 2 hours of discussion per week

8 weeks - 6 hours of lecture and 2 hours of discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: de Janvry

Also listed as: ENVECON C151

Economic Development: Read Less [-]

**ECON N171 Economic Development 4 Units** 

Terms offered: Summer 2015 10 Week Session, Summer 2015 8 Week

Session, Summer 2012 8 Week Session

Problems of underdevelopment and poverty, policy issues, and

development strategy.

Economic Development: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A or 101A or Environmental Economics and Policy

100

**Hours & Format** 

Summer: 8 weeks - 8 hours of lecture and 0 hours of discussion per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Economic Development: Read Less [-]

ECON 172 Case Studies in Economic Development 4 Units

Terms offered: Spring 2018, Spring 2017, Fall 2015 A detailed study of the problems of development in a selected geographical area in Asia or Africa or Latin America.

Case Studies in Economic Development: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A

Repeat rules: Course may be repeated for credit with instructor consent.

Course may be repeated for credit when topic changes.

**Hours & Format** 

Fall and/or spring: 15 weeks - 3-3 hours of lecture and 0-1 hours of

discussion per week

Summer: 8 weeks - 6-6 hours of lecture and 0-2 hours of discussion per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Case Studies in Economic Development: Read Less [-]

# **ECON 173 Economic Development Seminar 4 Units**

Terms offered: Fall 2010, Fall 2009, Spring 2009

A seminar paper will be required.

Economic Development Seminar: Read More [+]

**Rules & Requirements** 

Prerequisites: 171 or 172 and consent of instructor

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of seminar per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Economic Development Seminar: Read Less [-]

# ECON 174 Global Poverty and Impact Evaluation 4 Units

Terms offered: Fall 2018, Spring 2018, Fall 2017 Rather than simply describing the causes and symptoms of global

poverty, this course will explore the variety of tools available for rigorously measuring the impact of development programs. Through weekly case studies of field research, the course will cover impact evaluation theory and methods. The course will culminate with a final project in which each student will design an impact evaluation of a policy or intervention.

Global Poverty and Impact Evaluation: Read More [+]

**Rules & Requirements** 

**Prerequisites:** At least one prior term of intermediate economics (i.e., 100A or 100B) and some prior coursework in statistics

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of

discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Miguel

Global Poverty and Impact Evaluation: Read Less [-]

### **ECON C175 Economic Demography 4 Units**

Terms offered: Spring 2018, Spring 2017, Spring 2016

A general introduction to economic demography, addressing the following kinds of questions: What are the economic consequences of immigration to the U.S.? Will industrial nations be able to afford the health and pension costs of the aging populations? How has the size of the baby boom affected its economic well being? Why has fertility been high in Third World countries? In industrial countries, why is marriage postponed, divorce high, fertility so low, and extramarital fertility rising? What are the economic and environmental consequences of rapid population growth? Economic Demography: Read More [+]

Rules & Requirements

Prerequisites: Economics 1 or 2

**Hours & Format** 

Fall and/or spring: 15 weeks - 3-3 hours of lecture and 0-1 hours of

discussion per week

Summer:

6 weeks - 7.5-7.5 hours of lecture and 0-2.5 hours of discussion per week 8 weeks - 6-6 hours of lecture and 0-2 hours of discussion per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Lee

Also listed as: DEMOG C175

Economic Demography: Read Less [-]

### **ECON N175 Economic Demography 3 Units**

Terms offered: Summer 2013 10 Week Session, Summer 2013 8 Week Session

A general introduction to economic demography, addressing the following kinds of questions: What are the economic consequences of immigration to the U.S.? Will industrial nations be able to afford the health and pension costs of the aging populations? How has the size of the baby boom affected its economic well being? Why has fertility been high in Third World countries? In industrial countries, why is marriage postponed, divorce high, fertility so low, and extramarital fertility rising? What are the economic and environmental consequences of rapid population growth? Economic Demography: Read More [+]

Rules & Requirements

Prerequisites: Economics 1 or 2

Credit Restrictions: Students will receive no credit for Economics N175 after taking Economics C175/Demography C175; Economics 175/Demography 175. A deficient grade in Economics C175/Demography C175 may be removed by taking Economics N175.

**Hours & Format** 

Summer: 8 weeks - 6 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Economic Demography: Read Less [-]

### **ECON C181 International Trade 4 Units**

Terms offered: Fall 2018, Spring 2018, Fall 2017

The theory of international trade and its applications to tariff protection. This course is equivalent to UGBA 118; students will not receive credit for both courses.

International Trade: Read More [+]

**Rules & Requirements** 

Prerequisites: Economics100A-100B or Economics 101A-101B

Credit Restrictions: Students will receive no credit for Economics C181/ Environmental Economics C181 after completing Economics 181 or N181. A deficient grade in Economics 181, or N181 may be removed by taking Economics C181/Environment Economics and Policy C181.<BR/>

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of

discussion per week

Summer: 8 weeks - 6 hours of lecture and 2 hours of discussion per

week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Also listed as: ENVECON C181 International Trade: Read Less [-]

### **ECON N181 International Trade 4 Units**

Terms offered: Summer 2018 First 6 Week Session, Summer 2017 First 6 Week Session, Summer 2016 First 6 Week Session

The theory of international trade and its applications to tariff protection.

International Trade: Read More [+] Rules & Requirements

Prerequisites: Economics 100A-100B or Economics 101A-101B

Credit Restrictions: Students will receive no credit for Economics N181 after passing Economics 181 or Economics C181/Environmental Economics C181. A deficient grade in Economics 181, Economics C181/Environment Economics C181 may be removed by taking Economics N181.

#### **Hours & Format**

#### Summer:

6 weeks - 10 hours of lecture per week 8 weeks - 8 hours of lecture per week

#### **Additional Details**

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

International Trade: Read Less [-]

# **ECON 182 International Monetary Economics 4 Units**

Terms offered: Fall 2018, Summer 2018 8 Week Session, Fall 2017 The balance of payments, the determination of the trade balance and income under fixed and floating exchange rates, money and prices in open economies, the internationalization of financial markets and its implications, international macroeconomic interdependence, capital flows, and the determination of the exchange rate.

International Monetary Economics: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A-100B or 101A-101B

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture and 0-1 hours of discussion per week

Summer: 8 weeks - 7.5 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

International Monetary Economics: Read Less [-]

# **ECON 191 Topics in Economic Research 4 Units**

Terms offered: Fall 2018, Spring 2018, Fall 2017

This course discusses recent research and policy developments. The core objective is to expose students to different aspects of research in economics. A sequence of five different frontier research topics are studied in depth each semester. Each topic lasts three weeks, during which students will familiarize themselves with cutting-edge economic research and methodology. Students will then develop their own research ideas and write two medium- size research papers.

Topics in Economic Research: Read More [+]

**Rules & Requirements** 

Prerequisites: 100A or 100B

**Hours & Format** 

Fall and/or spring: 15 weeks - 3 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Topics in Economic Research: Read Less [-]

# ECON H195A Senior Honors Thesis 1 - 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

Preparation for writing a thesis, finding and organizing a topic, gathering data and getting started. H195A is not prerequisite to H195B.

Senior Honors Thesis: Read More [+]

**Rules & Requirements** 

**Prerequisites:** Senior honors candidates only (students with major GPA of 3.50 or better or permission of instructor.)

**Hours & Format** 

Fall and/or spring: 15 weeks - 1-3 hours of independent study per week

Summer:

6 weeks - 1-5 hours of independent study per week 8 weeks - 1-4 hours of independent study per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final

exam not required.

Senior Honors Thesis: Read Less [-]

# ECON H195AS Senior Honors Thesis 1 - 3 Units

Terms offered: Prior to 2007

Preparation and writing of an honors thesis under the supervision of a member of the faculty. H195AS is not a prerequisite to H195BS.

Senior Honors Thesis: Read More [+]

**Rules & Requirements** 

Prerequisites: Senior honors candidates only, with major GPA of 3.5 or

better. Permission of undergraduate adviser

**Hours & Format** 

Summer: 15 weeks - 1-3 hours of independent study per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final

exam required.

Senior Honors Thesis: Read Less [-]

# ECON H195B Senior Honors Thesis 1 - 3 Units

Terms offered: Fall 2018, Spring 2018, Fall 2017

Writing a thesis under the supervision of a faculty member. Applications and details through the departmental undergraduate office. H195A is not

prerequisite to H195B.

Senior Honors Thesis: Read More [+]

**Rules & Requirements** 

Prerequisites: Senior honors candidates only (students with major GPA

of 3.50 or better or permission of undergraduate adviser)

**Hours & Format** 

Fall and/or spring: 15 weeks - 1-3 hours of independent study per week

Summer:

6 weeks - 1-5 hours of independent study per week 8 weeks - 1-4 hours of independent study per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Senior Honors Thesis: Read Less [-]

# ECON H195BS Senior Honors Thesis 1 - 3 Units

Terms offered: Prior to 2007

Preparation and writing of an honors thesis under the supervision of a

member of the faculty.

Senior Honors Thesis: Read More [+]

**Rules & Requirements** 

Prerequisites: Senior honors candidates only, with major GPA of 3.5 or

better. Permission of undergraduate adviser

**Hours & Format** 

Summer: 15 weeks - 1-3 hours of seminar per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Senior Honors Thesis: Read Less [-]

# ECON 196 Special Topics in Economics 1 - 4 Units

Terms offered: Fall 2018, Fall 2016, Spring 2015

Study in various fields of economics. Topics will vary from semester to semester and will be announced at the beginning of each semester.

Special Topics in Economics: Read More [+]

**Rules & Requirements** 

Prerequisites: Upper division standing or consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

**Hours & Format** 

Fall and/or spring: 15 weeks - 1-4 hours of lecture per week

Summer

6 weeks - 2.5-10 hours of lecture per week 8 weeks - 1.5-7.5 hours of lecture per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Special Topics in Economics: Read Less [-]

### **ECON 197 Field Studies 1 - 4 Units**

Terms offered: Summer 2018 8 Week Session, Spring 2018, Summer 2017 8 Week Session

Written proposal must be approved by Department Chair. Supervised field studies in economics. Projects may be initiated by the students.

Field Studies: Read More [+] Rules & Requirements

Prerequisites: Upper-division standing

Repeat rules: Course may be repeated for credit without restriction.

**Hours & Format** 

Fall and/or spring: 15 weeks - 1-4 hours of independent study per week

Summer:

6 weeks - 1-5 hours of independent study per week 8 weeks - 1-4 hours of independent study per week 10 weeks - 1.5-6 hours of independent study per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final

exam not required.

Field Studies: Read Less [-]

### **ECON 198 Directed Group Study 1 - 4 Units**

Terms offered: Spring 2018, Spring 2017, Fall 2016

Written proposal must be approved by Department Chair. Seminars for the group study of selected topics, which will vary from year to year.

Topics may be initiated by students.

Directed Group Study: Read More [+]

**Rules & Requirements** 

Prerequisites: Upper-division standing and consent of instructor

Credit Restrictions: Enrollment is restricted; see the Introduction to

Courses and Curricula section of this catalog.

Repeat rules: Course may be repeated for credit without restriction.

**Hours & Format** 

Fall and/or spring: 15 weeks - 1-4 hours of directed group study per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final

exam not required.

Directed Group Study: Read Less [-]

# ECON 199 Supervised Independent Study and Research 1 - 4 Units

Terms offered: Fall 2018, Spring 2018, Fall 2017

Written proposal must be approved by Department Chair. Enrollment is

restricted.

Supervised Independent Study and Research: Read More [+]

**Rules & Requirements** 

Prerequisites: Upper-division standing

Credit Restrictions: Enrollment is restricted; see the Introduction to

Courses and Curricula section of this catalog.

Repeat rules: Course may be repeated for credit without restriction.

**Hours & Format** 

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Summer:

6 weeks - 1-5 hours of independent study per week 8 weeks - 1-4 hours of independent study per week 10 weeks - 1.5-6 hours of independent study per week

**Additional Details** 

Subject/Course Level: Economics/Undergraduate

 $\begin{tabular}{ll} \textbf{Grading/Final exam status:} & \textbf{Offered for pass/not pass grade only. Final} \\ \end{tabular}$ 

exam not required.

Supervised Independent Study and Research: Read Less [-]