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# Information for New Majors in Economics at Columbia

Welcome to the Department of Economics. Economics is a very popular major at Columbia, and many of you have not had the opportunity to speak with anyone in the department about your major. You may not even be sure to whom you should direct any questions that you have.

Below, I hope to provide some useful information, and to direct you to the sources of the specific information that you need to make the most of your experience here at Columbia as an economics student. As a declared major, you will occasionally receive important information about the department, courses offered, opportunities for undergraduates and events that we think may be of interest to our majors. We do not send out information very often, so when you do receive an email from the department, please take a moment to read it. Information that we consider less urgent to bring to your attention will be posted on the department's WIKI space, *Econ Info for Students*.

### **Completing the Major**

As stated in the Bulletin, it is expected that students will have completed all of the core economics courses, UN1105, UN3211, UN3213 and UN3412 (or POLS GU4712 for Econ-Poli Sci majors) prior to their senior (final) year at Columbia. Students who will not complete these courses before the start of their final year, must write to me for **permission** to take any of these courses in their final year. Students <u>will not</u> be allowed to take their senior seminars concurrently with any of these core economics courses. Thus, failure to complete any of these courses prior to your final semester will prevent you from graduating as a major in economics, financial economics or a joint major. If you would like to sit down with someone in the department to make a course plan to complete your major, then you should see **econ-advising** during their office hours (see below for more information about advising).

To make sure that you are making good progress towards your degree in economics, download and fill out a <u>checklist</u> for your major from the department website. You should do so prior to the April registration period. The checklist will alert you to any problems that you will need to bring to the attention of the economics department. If you have any questions or concerns about your major requirements, then you should come into the department and consult with **econ-advising**.

### Website

The single <u>best</u> resource for getting accurate and timely information about the economics major is the department's own website at <u>https://econ.columbia.edu/undergraduate/</u>

Below is a **guide** to the information available on our website.

#### **Student information**

- *Advisors*: Office hours for the advisors are posted on this page. Students may also email their questions to **econ-advising@columbia.edu**.
- *FAQ*: The quickest way to get the answer to a question about major requirements is to check the FAQ page.
- *Transfer Credit Information*: Details for getting major approval for courses taken outside of the Columbia Department of Economics are posted on this page.
- *Econ Info for Students (WIKI):* The department posts internal and external announcements regarding talks and lectures, publishing opportunities, research assistant positions, teaching assistant positions, fellowships, internships and employment opportunities, educational opportunities and more. This information is generally NOT sent out on the major listserv. **Students are encouraged to check this WIKI periodically for new postings.** You will need to log in with their *UNI* and *password*.
- *Columbia Economics Review:* The CER is an undergraduate economics journal supported by the Program for Economics Research.
- *Computing and Data Resources*: Programming tutorials and links to information for the 2 primary statistical programming languages used in economics courses (STATA and R) can be found on this page. The office hours for the Programming and Data TA are posted on this page, as well as, on the Advisors page.

#### **Course Information**

- *Registration Information*: Here you will find registration information for our courses that have restricted registration (eg. corporate finance, research credit, etc.)
- Sample Programs: Economics electives sorted by academic interest and career goal.
- Senior Seminars (Registration Info and Descriptions): Posted on these two pages are the topics of the current senior seminar offerings and the registration procedures to take a senior seminar. All students should read the Seminar Registration page prior to their final year at Columbia.
- *Tutors*: Here you will find a link to a list of graduate student tutors in economics.

#### **Requirements and Forms**

• *Checklists*: Use these checklists to keep track of your progress in your major. These checklists will also alert you to some very common problems that you need to address

with the department. You should fill one out as soon as possible.

• *Transfer credit form*: If you apply for transfer credits, fill out the form posted here and include it in your transfer credit submission.

#### Announcements

The following documents are posted in the Announcements section:

- Info for New Majors: A copy of this memo is posted under Announcements.
- *Newsletters:* Prior to the registration periods in November and April, we send out information regarding major requirements and course offerings.
- *Summer Mailing*: Early in August, we also send out information regarding major requirements, application to honors thesis seminar and course offerings.

#### **Opportunities**

- *Research Opportunities for Current Students*: Information on Research Credit (GU4995 and 4996) and on finding a position is posted here. Students considering graduate work or writing a senior thesis in economics should take one or more RA positions during their time at Columbia.
- *Full-Time Research Opportunities for Graduates*: This page has links to many organizations (academic, governmental, private sector, etc.) that hire RAs in economics. Students considering graduate work in economics, should consider taking a pre-doctoral RA position for two years after graduation.
- *Career Opportunities*: Here are links to pages with information about careers in economics, as well as, links and tips for career searches.

#### **Honors and Prizes**

- *Departmental Honors* and *Senior Honors Thesis*: General criteria to receive honors in economics is listed here. Tips for writing a thesis, finding a topic and finding an adviser are also posted here.
- *Departmental Honors Recipients*: A list of all thesis writers and the titles are posted here as well as several examples of recent senior theses.
- *Prizes*: Here you will find information about eligibility for the awards and how to apply for them. A list of recent prize recipients is also posted.

# Advising

Two **graduate student advisors** hold office hours each week during the academic year, and respond to student emails to provide timely answers to the most common questions that students have regarding the major. The graduate student advisors will be able to discuss *major requirements, scheduling and course selection* as well as *review your checklists and discuss your progress in the major*. Other than transfer credit or study abroad questions (see below), students should direct all questions and concerns about their major to these advisors. In most cases, the graduate student advisors will be able to answer your questions directly. In a few cases, they may refer you to someone else in the department (such as myself) or in your school for further information. Office hours for these advisors is on the *Advisors* page of the website at the beginning of the semester.

The one issue that the graduate student advisors do **not** handle is **approval for transfer credits or study abroad credits**. All economics transfer credits must be approved in writing by the Department of Economics. Information about the transfer credit process is below.

Students may request a **personal faculty advisor** to discuss academic or career goals. Faculty advisors <u>will not</u> discuss major requirements - that is the role of the graduate student advisors. Faculty advisors will discuss course selection to meet intellectual goals and interests as well as career or research options. If you plan on attending a PhD program in economics or pursuing economics research after graduation, then it is recommended that you request a faculty advisor. To request a faculty advisor, you must complete the online form on the *Advisors* page. Faculty advisors are assigned only twice per semester.

If you receive information from sources outside of the department that appears to contradict the information that you read on our website or in the Bulletin, then you should not rely on that advice. In this case you should consult with one of the econ graduate student advisors or send email to *econ-advising@columbia.edu* for clarification of the rules.

Please note that the **DAR** (**Degree Audit Report in SSOL**) is <u>un</u>official and you should view the **DAR** only as a helpful way to keep track of the courses you have taken in economics. The DAR is on occasion **inaccurate** and often does not reflect transfer credits or special permissions that you have received from the department. The department does not use the DAR to check major requirements for graduation. You should **not rely** on the DAR to check your major requirements. You should use the **checklists** posted on the department website. If you have questions about your major requirements, then you should send those questions to <u>econ-advising@columbia.edu</u>.

### **Major Credit for Non-Department Coursework**

There is a limit to the types and number of courses that students may take for major credit **outside** of the Columbia Economics Department.

- We require that all **majors** and **joint majors** must take a **minimum of 5 lecture courses** in the Columbia Department of Economics. **Concentrators** must take a minimum of **4**.
- The remaining credits for economics <u>lecture</u> courses may come from *advanced placement credits* (*AP*, *IB*, *GCE*), *Barnard elective courses* (2000 or 3000 level), summer courses *taken at other institutions* and *transfer credits* (either taken before registering at Columbia or taken elsewhere while at Columbia).
- No Barnard core econ, math or statistics courses (BC1003, BC1007, BC2411, BC3018, BC3033, and BC3035) may be taken to complete any of the major requirements.
- No more than <u>one</u> 3000 level intermediate core (3211, 3213, and 3412) course may be taken outside of the department. No more than <u>one</u> of the core finance courses (3025 and 4280) for the financial economics major may be taken outside of Columbia University.
- Students must take their senior seminar in the Columbia Department of Economics.
- AP / IB / GCE Credits must be posted on students' SSOL transcript for CC students, and noted in student files for GS students, otherwise the department cannot credit students with satisfying the corresponding core courses, e.g. Calculus I, II (UN1101, UN1102), Principles of economics (UN1105). Note that **AP Statistics** does **not** exempt students from STAT UN 1201. Students must contact their school advisor if said credits are not posted on their SSOL transcript or noted in their student file.

Program	# Lecture Courses in economics <sup>1</sup>	Min # in Department <sup>2</sup>	Max # Outside <sup>3</sup>
Major	9	5	4
Financial Econ	8	5	3
Econ-Math	7	5	2
Econ-Pol.Sci.	7	5	2
<b>Econ-Statistics</b>	7	5	2
<b>Econ-Philosophy</b>	7	5	2
Concentration	7	4	3

• The following table summarizes the rules in terms of economics course counts:

#### **NOTES:**

- 1) The count of **lecture courses** represents the minimum number of economics lecture courses required of the program. The count does **not** include seminars, nor courses in other departments such as Math and Statistics.
- At least two of the three 3000 level core courses must be taken in the Department and no corresponding Barnard courses will be accepted. UN3025 Financial Economics and UN3265 Money and Banking are counted as departmental courses regardless of the instructor.

- 3) **Outside courses** include AP /IB/ GCE credits for Principles (1 course), transfer credits for Principles (1 course even if it was a two semester sequence), Barnard 2000 and 3000 level elective courses, courses taken during the summer session at other institutions, and (department approved) transfer credits from other universities.
- High School Math Courses and IB Math Standard Level exam: Students who have received written approval from the Math Department exempting them from MATH UN1101 Calculus-I based on their grades in a high school math course, and students who are exempted from Calculus-I from having taken the IB Standard Level exam in math must replace the missing 3 college credits by taking an additional course. The one additional course may be selected from the following list:
  - o Economics electives at the 2000 level or higher,
  - o Math courses (except MATH UN 1201)
  - Statistics courses at the 2000 level or higher
  - Computer Science courses at any level
- Note that in the case of **joint majors**, courses taken to fulfill the requirements of the affiliated department are subject to the rules of that department. For example, a joint major with political science must check with the Political Science Department on whether or not a particular course taken outside of Columbia is acceptable to fulfill the political science requirements of the joint major.

## **Transfer Credits**

Any economics courses taken outside of the Economics Departments at Columbia or Barnard that you would like to apply towards the completion of your economics degree **must be approved by the Department of Economics** in addition to approval by your school.

- The *Transfer Credit Information* page on the website has details on which courses may be eligible for transfer credit, as well as information on how to apply for transfer credit. Please read the information carefully before submitting your materials for review.
- Transfer credits for Calculus-I and Stat 1201 must also be approved by the Economics Department.
- **Transfer credit for math or statistics courses** *other than Calculus-I and Stat 1201* must be **reviewed by the Math or Statistics department**. Students who have received transfer credit approval from the math or statistics department **must** forward the approval(s) to the Economics department.
- If you are planning on **studying abroad** or during the **summer** at a school other than Columbia, you should speak with Sunil Gulati before taking any courses at another institution that you wish to use for major credit.

• If you took courses at another institution **prior** to coming Columbia that you hope to use for major credit, then you must speak with your school adviser to start the process of applying for transfer credit approval for the major.

### **Course Pre-requisites**

The Department **strictly** enforces all course prerequisites. Prerequisite courses **cannot** be taken concurrently with or after the course—they must be taken **before** the course. Students who take a course out of sequence (before or concurrently with its prerequisites) will **not** be allowed to count those credits towards the completion of their major, and consequently will be required to take an additional course to replace those credits. For placement in the calculus sequence, please consult the Math department's section of the Bulletin.

Course	Prerequisites	
UN1105	None	
UN3213	Math UN1101, Econ UN1105;	
	Co-requisite: Math UN1201 <sup>*</sup>	
UN3211	Math UN1201, Econ UN1105	
UN3412	Math UN120, Stat UN1201 and	
	Econ UN3211 or UN3213	
2000 level Electives	Econ UN1105	
3000 level Seminars	Econ UN3211, UN3213, UN3412	
UN3025 Financial Economics,		
GU4020 Econ of Uncertainty,		
GU4230 Economics of NYC,		
GU4260 Market Design,		
GU4280 Corporate Finance,	Econ UN3211, Econ UN3213 and Stat UN1201	
GU4370 Political Economy		
GU4700 Financial Crises,		
GU4710 Finance and the Real Economy,		
GU4850 Cognitive Mechanisms and Economic		
Behavior		
GU4860 Behavioral Finance	Econ UN3211, UN3213, UN3412	
GU4211 Advanced Micro	Econ UN3211, UN3213, Math UN2010	
	Co-requisite: Math UN2500 or Math GU4061	
GU4412 Advanced Econometrics,	Econ UN3211, UN3213, UN3412 and Math UN2010	
GU4213 Advanced Macro		
GU4413 Econometrics of Time Series	Econ UN3211, UN3213, UN3412	
	Co-requisite: Math UN2010 <sup>*</sup>	
All other UN3000-GU4000 level Electives	Econ UN3211, UN3213	
All Seminars (except 4921)	Econ UN3211, UN3213, UN3412	
GU4921 Political Econ seminar	Econ UN3211, UN3213, UN3412 and GU4370	
Barnard Electives (BC3000)	Barnard prerequisites – check the Barnard bulletin	

The **prerequisites** for courses are as follows:

\*Co-requisite courses may be taken either before or concurrently with the class.

## **Undergraduate TA positions**

The department employs a number of undergraduates as Teaching Assistants in economics courses to work alongside our graduate TAs. The TA positions pay \$1800 per semester, and generally require that the TA hold a recitation section and an office hour each week, and participate in the grading of homework assignments. In August, the Department will send out an email soliciting applications for these TA positions.

## **Undergraduate RA positions**

Available RA positions are posted on the WIKI page. Interested students should read the information about RA positions posted on the Opportunities page.

Susan Elmes Director of Undergraduate Studies Economics Department