

To: Economics Majors, Joint Majors, and Concentrators
From: Susan Elmes, Economics Department DUS
Subject: Information for academic year 2016-2017
Date: August 2016

This memo is addressed to all students who have declared a major, joint major, or concentration in economics to help you plan your academic program. Please take a few minutes to read through the information below.

Graduation Clearance

In order for you to graduate, the department must certify that you have completed your declared program in economics. To do that, we check your Columbia transcript as well as any transfer credits that have been approved by the department. Transfer credits that are not approved by the department are not counted towards the major requirements. Each year, we discover many students whose records are incomplete or who have not strictly followed the department's course sequencing requirements. In some cases, this is not uncovered until it is too late for the student to graduate on time with the economics program that he or she has been working towards. It is your responsibility to make sure that you have completed your economics major, and that your student records are up to date. You should complete a checklist for your program (available [here](#) online) and if you have any questions or concerns about your completed checklist, then you should contact **econ-advising@columbia.edu**. You should not rely on your DAR or on your College or GS advisor to tell you that you have completed your economics program. Four of the most common problems that we find are:

- ❖ **AP, IB or GCE credits** not listed on the transcript: If you are using any of these advanced placement credits in place of *Principles of economics* or *Calculus I,II*, then those credits must appear on the bottom of your transcript. If they do not, then you are officially missing those required courses for the major/concentration, and you must speak with your College or GS advisor ASAP to have those advance placement credits posted.
- ❖ **Math High School credits:** If you have high school math credits that exempts you from *Calculus I*, then you must obtain written certification from the math department, and have that sent to the economics department (ly38).
- ❖ **Transfer credits:** All economics transfer credits used for an economics program must be approved in writing by the economics department. See the *Transfer Credit Info* page on the economics department website for information on how to apply for departmental transfer credit approval. All *math* and *statistics* transfer credits must be approved by the math /statistics department, and a copy of that approval(s) sent to the economics department (ly38).
- ❖ **Course Sequencing:** The department does not count credits from courses that were taken prior to the completion of the course pre-requisites. All course pre-requisites are posted in the bulletin and on the directory of classes. If you have taken a course prior to, or concurrently with its pre-requisites, then you will be required to take at least one additional course in economics, and you should contact Laura Yan (ly38) ASAP to discuss what additional course (or courses) that you will be required to take.

The earlier that you find any of these issues, the easier it is to take care of them. So, all majors and concentrators should fill out the checklist for their program. Students who have any questions or concerns about the fulfillment of his or her major or concentration, are advised to see one of the graduate student advisors (weekly hours will be posted), or send email to econ-advising@columbia.edu. The department will not give graduation clearance to any student who has not satisfied the major/concentration requirements due to any potential problems caused by the above points.

Advising

Graduate student advisors will hold office hours each week 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, course scheduling and selection*, as well as *review your checklists and discuss your progress in the major*. Other than transfer credit or study abroad questions, students should direct all questions and concerns about their major to the graduate student advisors. The graduate student advisors will be able to answer nearly all of your questions. You may email them at econ-advising@columbia.edu. Office hours will be posted on the *Advisors'* page of the department website in the week prior to the beginning of the semester.

One issue that 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. The department divides transfer credit approvals between myself and Sunil Gulati. If you have transferred to Columbia and you would like to transfer credits from economics courses taken before you came to Columbia, then you should contact your CC or GS advisor to initiate the departmental transfer credit application process. If you are at Columbia and would like to take economics courses at another institution (including summer courses and courses taken abroad), then you should see Dr Gulati. Information regarding the application for transfer credits and the materials you must present with your application is available on the departmental website on the *Transfer Credit Info* page. Please read that material carefully before submitting your materials for approval.

Students may request a personal faculty advisor to discuss academic or career goals. Faculty advisors will not 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. There is a form on the *Advisors'* page of the website to request a faculty advisor. Fill out the form and leave it in my mailbox (Susan Elmes) on the 10th floor of IAB in the department's main office. We will try to match you with a faculty member that shares your academic interests.

Programming and Data Assistance

Beginning in the fall of 2016, we hope to have a TA in the department who will assist students with data and programming related questions. Students who are writing empirical papers or working on empirical projects either in a lecture (other than UN3412 Econometrics) or a seminar will be able to speak with the TA during his or her office hours regarding programming issues. The office hours will be distributed on the major listserv and posted on the advising page of the department website early in the semester. The TA will be able to answer many questions regarding STATA and R programming. In addition, the TA will hold a number of workshops on how to handle some of the more common data issues that economics researchers face. Students who are planning on pursuing research careers in economics are strongly advised to attend these workshops. Finally, we plan to post some basic STATA and R tutorials on the department website. Students who are taking econometrics should continue to consult with the TAs assigned to their classes to discuss their programming issues.

Course Information

For the most up to date information on class offerings (*including registration numbers, days, times and classrooms*) you should check the Registrar's [Directory of Classes](#). In most cases, the economics department sets the course registration cap equal to the room capacity. Because of the shortage of class room space, it is generally not possible to move classes to larger rooms. Hence, when class registration reaches the cap number, you cannot be added to the class roster by the department or the faculty member. In this instance you must sign up for the wait list online.

UN3981 Applied Econometrics Seminar

Beginning in the academic year 2016-2017, the department will offer a limited number of junior seminars. The goal of these seminars is to strengthen the research and writing skills of our students. Like senior seminars, the prerequisites of a junior seminar are 3211, 3213 and 3412 and will have a limited number of seats. Unlike senior seminars, a junior seminar WILL count as an elective course and may be taken for elective credit for the economics, financial economics, or any joint major. A junior seminar does NOT replace a senior seminar,

so a student who takes a junior seminar will take at least two seminars to complete the economics major. Students will be admitted to the seminars from the wait list one week prior to the beginning of classes. Preference will be given to junior majors who are interested in writing a senior thesis in economics and who are good candidates to do so. **A student who successfully completes a junior seminar will be given preference in admission to the honors seminar.**

The first junior seminar that we will offer is UN 3981 Applied Econometrics Seminar with Prof Bai. The class will be on Mondays from 4:10 – 6 PM and the course description is as follows:

The objective of this course is to develop students' research skills and to learn the process of writing an original research paper. The skills and process include the ability to identify a problem and state it in a concise manner, literature review, data collection, model formulation and estimation, evaluation of the problem, and writing up the findings in a format of research paper. An immediate and more specific goal is to prepare the students to tackle a senior thesis project.

Towards this goal, this course will review or introduce the most widely used econometric techniques for empirical research. These include multiple regressions, probit and logit models, instrumental variables methods, panel data methods, regression discontinuity designs. This course will also introduce some time series methods such as vector autoregressive process, cointegration analysis, financial time series, and modeling of volatilities. Students will need to practice these methods with a computer software package (R or STATA) and with actual economic data sets.

If you are interested in taking this seminar then you must sign up for the wait list in SSOL.

GU4370 Political Economy

Political economy will only be offered in the fall semester. All seniors in the joint major with political science who have not previously taken political economy must take GU4370 Political Economy this fall. Juniors planning on graduating one or two semesters early must also take GU4370 this fall.

UN3213 Intermediate Macro

As of Fall 2016, Math 1201 Calculus III will be a co-requisite for UN3213 Intermediate Macro. Students must have either taken Calculus III or must take it concurrently with Intermediate Macro. Students who have previously taken UN3213 Intermediate Macro will not be affected by this change.

New Courses in Behavioral Economics and Finance

The department plans to add two new courses in behavioral economics in the Spring Semester. Prof Dean will offer GU4840 Behavioral Economics and Prof Hong (new finance professor) will offer GU4860 Behavioral Finance. Both courses will count as electives for all economics majors, concentrators and joint majors. Information about both classes will be included in the pre-registration mailing in November.

SDEV UN2320 Economic and Financial Methods for Sustainable Development

Economics majors and concentrators may take SDEV UN2320 for 2000 level elective credit. If you are pursuing programs in both economics and sustainable development, you may not double count this course towards both programs. If you took this class in a previous year and would like to count it as a 2000 level elective, then you must send Laura Yan an email (ly38) indicating that you would like to count this course as your 2000 level elective in economics.

College Business Courses

Columbia College offers several business oriented classes. The department does not oversee these courses, and does not have any information about them. **If you have questions about these courses, please contact the Business School for more information at BusinessManagement@gsb.columbia.edu.** Note that you may only take these courses for credit towards the financial economics major. You should consult the bulletin for more information on the requirements for the financial economics major. You may not take these courses for credit towards an economics major or any of the joint majors.

5000 and 6000 Level Courses

Graduate level courses in economics (courses numbered 5000 and above) are closed to online registration by undergraduates. All 5000 level courses are limited to Masters students only. Undergraduates wishing to take a 6000 level class must receive approval from both the Director of Undergraduate Studies and the Director of Graduate Studies. Prior to taking any of these 6000 level classes, it is expected that you have successfully completed one or (preferably) more of the advanced undergraduate courses (4211, 4213 and 4412), higher level statistics (such as the year-long sequence 3105-3107), and at least one semester of mathematical

analysis (4061). Requests to take one of the 6000 level courses must be made in writing (se5@columbia.edu) by **August 22**.

Elective Courses Offered Only in the Fall

The following courses will be offered by the department only in the Fall semester: UN2105 The American Economy, GU4020 Economics of Uncertainty and Information, GU4213 Advanced Macro, GU4228 Urban Economics, GU4301 Growth and Development, GU4321 Economic Development, GU4325 Economic Development of Japan, GU4370 Political Economy, and GU4412 Advanced Econometrics.

Elective Courses Offered Only in the Spring

The following courses will be offered by the department only in the Spring semester: UN2257 Global Economy, GU4211 Advanced Micro, GU4230 Economics of NYC, GU4235 Historical Foundations of Modern Economics, GU4260 Market Design, GU4400 Labor Economics, GU4413 Time Series, GU4480 Gender and Applied Economics, GU4750 Globalization and its Risks, GU4840 Behavioral Economics and GU4860 Behavioral Finance.

Elective Courses Offered Both Semesters

The following courses will be offered in both the fall and spring semesters: UN3025 Financial Economics, UN3265 Money and Banking, GU4251 Industrial Organization, GU4280 Corporate Finance, GU4415 Game Theory, 4465 Public Economics, and GU4500 International Trade.

Elective Requirements for Joint Majors

- ❖ If you are a joint major with political science, statistics or mathematics, then only economics elective courses at the 3000 level or higher may be counted towards your major requirements.
- ❖ If you are an **Economics-Philosophy** joint major then all three of your electives must be at the 3000 level or higher. In addition, you must select two of your required three electives from the following list to fulfill your major requirements: GU4020 Economics of Uncertainty and Information, GU4080 Globalization, Incomes and Inequality, GU4213 Advanced Macro, GU4228 Urban Economics, GU4230 Economics of NYC, GU4235 Historical Foundations of Modern Economics, GU4301 Economic Growth and Development, GU4321 Economic Development, GU4370 Political Economy, GU4400 Labor Economics, GU4415 Game Theory, GU4438 Economics of Race in the United States, GU4465 Public Economics, GU4500 International Trade, GU4615 Law and Economics, GU4625 Economics of the Environment, GU4750 Globalization and its Risks, GU4840 Behavioral Economics, GU4850 Cognitive Mechanisms and Economic Behavior, GU4860 Behavioral Finance, BC3011 Inequality and Poverty, BC3019 Labor Economics, BC3029 Development Economics, BC3039 Environmental and Natural Resource Economics and BC3041 Theoretical Foundations of Political Economy. **Underlined courses** indicate that these classes are offered in the fall semester. Your third elective may be any elective at the 3000 level or higher.
- ❖ If you are a **Financial Economics** major then you must take 4 elective courses and a minimum of 2 of these must come from the following list of economics courses: UN3265 Economics of Money and Banking, GU4020 Economics of Uncertainty and Information, GU4213 Advanced Macroeconomics, GU4251 Industrial Organization, GU4412 Advanced Econometrics, GU4415 Game Theory, GU4465 Public Economics, GU4500 International Trade, GU4505 International Macro, GU4526 Transition Reforms, Globalization and Financial Crises, GU4700 Financial Crises, GU4840 Behavioral Economics, GU4850 Cognitive Mechanisms and Economic Behavior, GU4860 Behavioral Finance BC3014 Entrepreneurship, and BC3017 Economics of Business Organizations. **Underlined courses** indicate those courses offered in the fall. Your remaining 2 elective courses may come from the above list of economics courses or from the list of acceptable outside courses. See the major checklist on the department website or the bulletin for the list of courses that you may take for your remaining 2 elective courses for the financial economics major.

Seminars

- ❖ Please note that seminars will be strictly limited to **16** students. Registration for GU4911 section 0 is closed for the fall semester. Final assignments to the seminars will be made by **September 2**. All remaining seats will be available for walk in registration beginning on the first day of classes. During

the first week of classes only seniors may sign up for seminars. After the first week of classes any student who has completed his or her core requirements in economics may sign up for any seminar that remains open. For more information about the sign up process please see the [Senior seminar page](#) in the department's website.

- ❖ Students in the **Econ-Political Science** joint major must take GU4921. This seminar will be offered only in the spring semester. All students must have completed their econometrics requirement (either UN3412 or POLS GU4911) before taking the seminar. If you are a junior and are planning on graduating early (either in your junior year or fall of your senior year), then you must take this seminar in the spring semester as the department generally does not offer the seminar in the fall semester.
- ❖ Students in the **Econ-Philosophy** joint major must take GU4950, the economics and philosophy seminar which is only offered in the spring semester. If you are a junior who is planning on graduating early (either in your junior year or fall semester of your senior year) then you must take 4950 this spring. You must have completed all of your core requirements (UN3211, UN3213 and 3412) prior to taking the seminar.
- ❖ Students in the **Econ-Statistics** joint major must take the econometrics seminar, GU4918, which will be offered in the spring only. It will be assumed that students registered for this seminar have a strong background in econometrics and statistics. This joint seminar is open to all students.
- ❖ The following fall seminars will fulfill the seminar requirement for the **Financial Economics** major: GU4911 2 Masia, GU4911 3 Dutta, GU4911 4 Dang, GU4911 5 Riordan, GU4913 1 Alonso, GU4913 2 Roca, and GU4913 3 Sbordone.

Senior Honors Thesis - Departmental Honors

All students who are interested in writing a senior honors thesis during academic year 2016-17 should have submitted a preliminary proposal during the spring 2016 term. Regardless of whether you did or not, you must send your final proposal to me by **August 22** (se5@columbia.edu). The final proposal must include the following information:

1. A (minimum) one paragraph description of your topic. The paragraph must contain at least one economics question that you would like to address in your thesis. Since most theses are empirical, you must also note what data sets you will be using to answer your question.
2. A second paragraph indicating what in your background (either class work or work experience) qualifies you to work on your proposed topic (e.g. if your topic is Russian exchange rate movements you might want to tell me that you have taken international monetary theory).
3. All of the grades that you have received in your economics classes at Columbia. Simply copy the grades in economics classes as recorded in your Columbia DAR. You should not include grades from other departments. If you have transferred any economics credits then you should include those grades as well.
4. Finally, include the name(s) of faculty members that you believe would be interested in working with you. If you do not know a faculty member who would be interested, then you should look at the department's website for information on their research interests.

A faculty committee will review the proposals to both select students for the seminar and to help match students with an appropriate faculty member who will serve as the student's thesis advisor. If you are admitted to the honors seminar, Laura Yan will register you into GU4999 Honor Thesis.

GU4999 will run as a year-long course for 3 points per semester (students will be automatically registered again in the spring), with a grade reported only at the end of the academic year. Writing a thesis will substitute for the departmental seminar requirements. Students who wish to drop out of the honors program at the end of the fall semester may do so. In this case he or she will receive a grade of R for the fall semester. The student will then have to take a senior seminar to satisfy the seminar requirement.

In addition to working one-on-one with your faculty advisor, the senior thesis candidates will meet as a group to discuss their research and to present their final results. In the fall these meetings will be held on Tuesdays from 6:10-8 with Prof Salanie. You must be able to attend the Tuesday meetings if you would like to write a senior thesis. The first meeting will be in late September. Once you are registered for the seminar you will receive a meeting schedule.

For more information regarding Departmental Honors and the Senior Thesis, see the revised Honors and Prizes page on the department website. The new page includes advice, a link to a writing guide and examples of some of the outstanding theses of former students.

Journal of Economic Perspectives

Students interested in current research in economics should consult the Journal of Economic Perspectives which is now available free online at <http://www.aeaweb.org/jep/index.php>. The JEP is a general interest journal written for economists. Journal articles are surveys of current research in a wide variety of topics and are written for knowledgeable non-specialists in a given field. For example recent issues contain symposia on gender and test scores and another on financial markets. The archive is searchable back to 2002. All students (juniors and seniors) thinking of writing a senior thesis should use the articles in the JEP to help them shape a thesis idea.

Rules for Transfer Credits, AP/IB Credits and Barnard Electives

The department sets a minimum number of lecture courses that you must take in the Columbia economics department to fulfill your major requirements. The remainder of your credits may come from a combination of AP credits, transfer credits and Barnard elective course credits.

The following table outlines the rules for each of the majors and joint majors in economics.

Program	# Lecture Courses in Economics ¹	Min # in Department ²	Max # Outside ³
Major	9	5	4
Financial Econ	8	5	3
Math	7	5	2
Political Science	7	5	2
Statistics	7	5	2
Philosophy	7	5	2
Concentration	7	4	3

Notes

1. **Lecture courses** do not include seminars which must be taken in the Columbia department. The lecture course counts are counts of economics courses only, so the counts do not include math, statistics or courses in other departments. There is also no change on the rule that no more than one course may be taken at the 2000 level.
2. There is no change in the rule that at least 2 of the 3 3000-level core courses must be taken in the department and no corresponding Barnard courses will be accepted. The two V courses (UN3025 and UN3265) will continue to be counted as departmental courses regardless of the instructor.
3. Outside courses include AP (IB, GCE) credits for Principles (1 class), transfer credits for Principles (1 class even if it was a two semester sequence), Barnard 2000 and 3000 level elective courses and transfer credits from other universities.

Information regarding transfer credit approval can be found on the department website in the *Transfer Credit Info* page. You must read this material carefully before seeking approval. To apply for transfer credits for courses taken prior to registering at Columbia, you must speak with your CC or GS advisor to initiate the departmental transfer credits application process. To apply for transfer credits for courses taken during a study abroad or summer session, you must speak with Dr Gulati *prior* to taking those courses to seek preliminary approval. You must speak to him again when you return to campus to get a final approval.

Undergraduate TA Positions

This fall the department is hiring undergraduates to work alongside our graduate students as teaching assistants in several courses. Each assistant will be paid \$1800 per semester. An announcement will be sent shortly advertising the positions that are available. Applications for all positions will be due on **August 22**.

Fed Challenge

The College Fed Challenge is an economics competition sponsored by the Federal Reserve Bank of New York in partnership with the Eastern Economic Association. Five-member teams from colleges and universities in the Federal Reserve Bank of New York district make 20 minute presentations, concluding with a monetary policy recommendation, and respond to the judges' questions on current macroeconomic and financial conditions, monetary policy, and the Federal Reserve System. The judges are economists from the Federal Reserve Bank of New York, universities and private firms. District winners will travel to Washington, DC to participate in the National Competition held at the Board of Governors of the Federal Reserve System, with the opportunity to win a significant monetary prize from Moody's.

The Fed Challenge is a great way to learn more about macroeconomics, monetary and financial economics, and central banking as well as an opportunity to polish your presentation and networking skills. The workshop to prepare the team for the competition will meet on Wednesday evenings from 6:10 - 8. If you are interested in participating you should contact Sally Davidson (sjm7).

Undergraduate Research Assistants

At the beginning of the semester, the department will send out on the major listserv the names of faculty members who are looking for undergraduate research assistants. You will also find the latest information on jobs, internships and other opportunities for undergraduates on the wiki space: <http://econinfoforstudents.wikispaces.columbia.edu/>. Alternatively, if you know of a faculty member who would like to hire you as an assistant, then ask that faculty member to contact me. We usually grant 2 credits for approximately 5-7 hours of work per week. Please note that while students may receive credit for this course, it may not be used as a substitute for elective or seminar requirements in the major. Finally, if you are a student that pays tuition for individual credits then you will be required to pay for research credit. You may choose to work with a faculty member without receiving credit (and so incurring no cost), but the research credit will not appear on your transcript.

Graduate Study in Economics

Students interested in pursuing graduate work in economics are encouraged to read the admission guide on [econphd](#) and the special edition of the CSWEP [newsletter](#) focusing on getting into and finishing a PhD program. In addition, we have information on our website in the [FAQ](#) page. If you are considering graduate work you should speak with econ-advising ASAP to plan your course schedule. You should also request a faculty advisor.

Prizes

All prizes are open to majors and students in the joint majors.

The **Parker Prize** is awarded each year to the top CC economics major that will be pursuing a Ph.D. in economics. The prize committee will consider applicants who are not planning to immediately start graduate school the next academic year, although preference may be given to those students who are entering a Ph.D. program in 2017-18. Please be sure to let me know in the fall semester if you are applying for graduate study in economics for academic year 2017-18, or else plan to pursue a Ph.D. in economics within the next few years.

The **David Estabrook Romine Prizes** in Economics are available to both CC and GS students: one prize will be awarded for the best paper written in a senior seminar, and one prize will be awarded for the best senior honors thesis (the two prizes may not be given to the same student). Faculty will be asked to nominate students for these prizes and a faculty committee will select the winner. All prize winners will be announced at the end of the Spring term. If you are taking a senior seminar in the spring of your senior year and you want to be considered for the Romine Prize then you should speak with your instructor before the first week of April. At that time your instructor will be able to tell you when the deadline is for submission of a paper to be

considered for the Romine Prize. For more information about the prizes please refer to the *Departmental Honors and Prizes* page on the website.

The **Parker Prize for Summer Research** provides financial support for CC students who take unpaid summer internships that focus on research. By introducing students to original research, a summer internship can provide the foundation for an honors thesis or develop an interest in pursuing a graduate degree. We are looking to support up to five underclassmen (juniors preferred but it is open to all economics students). We will provide each student with a stipend of \$2500. All economics major, financial economics major or joint major in CC are eligible for these prizes.

For more information regarding Prizes, see the revised Honors and Prizes page on the department website.