## **<u>FINANCIAL ECONOMICS - MAJOR</u>** Undergraduate Requirement Check List

#### **Important Notes:**

- 1) This is a check list for your convenience only it does <u>not</u> replace the bulletin. For details regarding the requirements below <u>you must consult the bulletin</u>.
- 2) You must receive a grade of C- or higher in any class taken for major credit. The ONLY exception is UN1105 Principles which you may take Pass/D/Fail and must receive a "P" grade for it to count towards the major. If you have taken a required class P/D/F, then you will be required to uncover the P. <u>After receiving a P. you</u> <u>may not retake a course for a letter grade</u>.
- 3) You must have all transfer credits for economics classes approved by the economics department. For information on what transfer courses will be accepted and how to obtain approval for transfer credits in economics, math and statistics, go to: <u>http://econ.columbia.edu/transfer-credit-information</u>.
- 4) ECON and Math AP/IB/GCE Credits: said credits must appear in your SSOL transcript in order for the department to credit you with the completion of those core courses (ECON\_UN1105, MATH\_UN1101). GS Students: said credits must be confirmed in writing by your school advisor to the department. High school math and IB math *Standard-level* exam that exempt students from MATH UN1101, but do <u>not grant college credits</u> must have those missing credits <u>replaced</u> by taking an additional course for details, go to: <u>https://econ.columbia.edu/undergraduate/requirements-and-forms/</u>
- 5) You will <u>not</u> receive major credit for a course taken before the completion of its pre-requisites.

#### I. Quantitative Requirements

 MATH UN1101 Calculus I, or MATH UN1102 Calculus II, or AP credits
MATH UN1201 Calculus III (*Prerequisites: MATH UN1101 or UN1102*) or MATH UN1205 Accelerated Multivariable Calculus (*Prerequisites: MATH UN1101, UN1102*)
STAT UN1201 (*W1211*) Intro to Statistics (*Prerequisite: MATH UN1101*)

#### Notes:

- 1) You may substitute the Honors math sequence (*MATH UN1207-1208*) for Calculus I and III, and you may substitute a higher level stats course, such as STAT UN4204 (*W3107*) or STAT GU4001 (*W4150*) for STAT UN1201).
- 2) You should consult the Math dept's placement rules for calculus in the bulletin.

### **II. Economics Core Requirements**

All core courses must be completed by the <u>spring semester of your junior year</u>. You may only take a core course during your senior year with written approval of the economics department.

 <b>UN1105 Principles of Economics</b> <i>or</i> AP credits (you must have a grade of 9 or 10 on the AP exam) <i>or</i> IB credits (6 or 7 on the higher level exam). <i>No Prerequisites</i> .
 UN3211 Intermediate Microeconomics (Pre-reqs: ECON UN1105; MATH UN1201 or UN1205 or UN1207)
 <b>UN3213 Intermediate Macroeconomics</b> ( <i>Pre-reqs: ECON UN1105 and MATH UN1101</i> ); <u><i>Co-Req</i></u> : MATH UN1201 or UN1205 or UN1207)
 <b>UN3412 Introduction to Econometrics</b> ( <i>Pre-reqs: ECON UN3211 or UN3213; MATH</i> <i>UN1201 or UN1205 or UN1207; STAT UN1201</i> )

List any **<u>departmental approved substitution</u>(s)**, including transfer credits, for above requirements.

### **III. Finance Core Requirements**

 <b>UN3025 Financial Economics</b> ( <i>Pre-reqs: ECON UN3211, UN3213 and STAT 1201</i> )
 GU4280 Corporate Finance (Pre-reqs: ECON UN3211, UN3213 and STAT 1201)
 <b>BUSI UN3013 Financial Accounting</b> <i>or</i> <b>IEOR UN2261</b> Intro to Accounting and Finance <i>or</i> <b>ECON UN2261</b> Accounting & Finance for Economics

Notes:

- 1) All finance core courses must be completed <u>no later</u> than the <u>fall semester of your senior year</u>.
- 2) <u>UN3025 or GU4280</u> must be completed <u>before a senior seminar</u> may be taken.
- 3) At least one of the core finance courses, UN3025 and GU4280, must be taken at Columbia.

List any **<u>departmental approved substitution</u>(s)**, including transfer credits, for above requirements.

### **IV. Electives**

Four of the following (of which *two* must be from the *Columbia or Barnard Economics departments*):

- ECON UN3265 Economics of Money and Banking
- ECON UN3901 Economics of Education
- ECON UN3952 Macroeconomics and the Formation of Expectations
- ECON UN3953 Causes and Consequences of Inequality
- ECON GU4020 Economics of Uncertainty and Information
- ECON GU4213 Advanced Macroeconomics
- ECON GU4251 Industrial Organization
- ECON GU4260 Market Design
- ECON GU4412 Advanced Econometrics
- ECON GU4413 Econometrics of Time Series and Forecasting
- ECON GU4415 Game Theory or BC3080 Applied Game Theory
- ECON GU4465 Public Economics or BC3026 Economics of the Public Sector
- ECON GU4500 International Trade or BC3047 International Trade
- ECON GU4505 International Macroeconomics or BC3038 International Money and Finance
- ECON GU4526 Transition Reforms, Globalization and Financial Crisis
- ECON GU4615 Law and Economics
- ECON GU4630 Climate Finance
- ECON GU4700 Financial Crises
- ECON GU4710 Financial Markets and the Real Economy
- ECON GU4840 Behavioral Economics or BC3048
- ECON GU4850 Cognitive Mechanism and Economic Behavior
- ECON GU4860 Behavioral Finance
- ECON BC3014 Entrepreneurship
- ECON BC3017 Economics of Business Organizations

- ECON BC3043 Monetary Theory and Policy
- **BIOT** GU4180 Entrepreneurship in Biotechnology
- BUSI UN3021 Marketing Management
- BUSI UN3701 Strategic Behavior/StrategyFormulation
- BUSI UN3702 Venturing to Change the World
- BUSI UN3703 Leadership in Organizations
- BUSI UN3704 Making History through Venturing
- COMS W1002 Computing in Context: Finance or Economics Tracks ONLY
- **HIST** UN2903 (*W3903*) History of Finance
- **IEOR** E4106 Intro to OR: Stochastic Models
- IEOR GU4700 Intro to Financial Engineering
- MATH UN3050 Discrete Time Models in Finance
- MATH GR5010 Intro to Mathematics of Finance
- POLS UN3630 The Politics of International Economic Relations
- STAT UN3201 (*W3051*) Math Finance in Continuous Time
- STAT GU4261 (W4290) Statistical Methods in Finance
- STAT GU4207 (W4606) Elementary Stochastic Processes
- STAT GU4262 (W4635) Stochastic Processes for Finance

# **Rules for Barnard Electives, Transfer and AP Credits:**

The Financial Economics major must take a minimum of **8** lecture courses in economics (this count does not include courses in math and statistics). Students are required to take a **minimum of 5 lecture courses in the department**. Credits from *departmental approved transfer credits*, and *AP/IB/GCE*) may be used to fulfill the requirements for the remaining **3** lecture courses.

**List number of courses taken in the economics department:** (minimum = 5)

### Seminar

- Every student must take at least *one* seminar. Each semester the department will designate which economics seminars may be taken for credit for the financial economics major. This information will be posted online (on the senior seminars page) and emailed to students.
- Students must have completed either ECON UN3025 or GU4280 prior to taking their senior seminar.

List any **approved substitution(s)**, including transfer credits, for above requirements.

Students who have questions about any of the above requirements should first consult the bulletin or the online **FAQ page** at: <u>https://econ.columbia.edu/undergraduate/student-information/faq/</u> If after consulting the bulletin and the FAQ page you still have questions, then contact: <u>econ-</u> advising@columbia.edu.