

To: Economics, Economics-Environmental Studies, and  
Economics-Mathematics Majors  
From: Department of Economics  
Date: August 23, 2017  
Re: The Senior Assessment

## MEMORANDUM

The senior assessment for Economics and Economics-Combined majors includes the Major Field Test in Economics and an oral exam for Economics and Economics-Environmental Studies majors, plus additional requirements for Economics-Environmental Studies and Economics-Mathematics majors. The Senior Assessments of the Major (SAM) for the three Economics major programs are outlined below:

Major	Written Exam(s)	Oral Exam(s)
Economics	Major Field Test in Economics	Oral Exam in Economics
Economics-Environmental Studies	Major Field Test in Economics	Oral Exam in Economics Oral Exam in Environmental Studies (or defense of Thesis for Honors students)
Economics-Mathematics	Major Field Test in Economics Mathematics written exams	A combined oral Exam in Economics and Mathematics

### The Major Field Test in Economics

All senior Economics and Economics-Combined majors must take the Major Field Test (MFT) in Economics. See the 2017-2018 Economics Department Newsletter for this year's MFT date and registration instructions.

Information about the content of the Major Field Test in Economics:

From the Educational Testing Service website, "The ETS® Major Field Test for Economics consists of 90 multiple-choice questions, some of which are grouped in sets and based on materials such as diagrams, expository paragraphs, sets of equations and tables of data."

With regard to scoring, ETS advises that "(s)tudents should attempt to answer every question, since there are no penalties for guessing."

ETS offers some information about the content of the Major Field Test in Economics and a link to some sample questions at: <https://www.ets.org/mft/about/content/economics> .

### Oral Exams in Economics<sup>1,2</sup>

Economics and Economics-Environmental Studies seniors will take oral exams in Economics. See the 2017-2018 Economics Department Newsletter for oral exam dates and sign-up instructions.

On your oral exam day:

Each oral exam will be 50 minutes with a panel of two professors. After the exam is completed, the student will be asked to leave the room briefly so the professors can discuss the exam and offer an evaluation when the student returns. The entire process takes about 55 minutes.

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<sup>1</sup> Economics-Mathematics majors will take a combined Economics-Mathematics oral exam, and should contact Professor Belay to arrange for their exam time with him and the relevant Mathematics professor.

<sup>2</sup> The Environmental Studies oral exam usually occurs later in the spring semester and will be arranged separately through Professor Amy Molitor.

### Information about the content of the oral exams:

Students will face a mix of microeconomics and macroeconomics questions at the principles and intermediate levels, and may be asked to explain concepts using words, equations, graphs, and statistical methods; state any underlying assumptions and comment on their validity; and apply economic concepts to current or historical events, drawing on material from their core courses (econ 101/177, 102, 307, 308 and 227).

### Evaluation of performance on the Senior Assessment

Your oral exam professors will provide an initial judgement of your performance on this portion of the senior assessment, at the conclusion of your oral exam. Evaluation of performance on the entirety of the Senior Assessment will await the receipt of the MFT scores from Education Testing Service. The department typically makes decisions and notifies students soon after spring break. A weak performance on the oral exam can be partly offset by a strong performance on the MFT, and vice versa, for purposes of making decisions regarding “pass” or “fail” on the senior assessment.

### Suggestions

- 1) For both the Econ MFT and the oral exam, study the topics from the syllabi of the core courses and the attached outline of possible topics for the MFT. Study these at both the principles and intermediate level using your notes and/or books from your core courses (econ 101/177, 102, 307, 308 and 227). If you no longer have copies of your principles, statistics or intermediate textbooks, see if a prof has one they could lend you.
- 2) Study early and regularly. The goal is not just to memorize definitions, graphs, equations, and how they may be related to each other. The goal is to recognize when these tools are relevant for a scenario and to recall them so you can apply them correctly. Developing this capacity requires sustained studying.
- 3) Keep a running list of concepts that continue to stump you. Bring these listed items to a study group and/or to a professor’s office hours.
- 4) Familiarize yourself with the timed and multiple choice format of the MFT. ETS posts 25 sample questions, available from: <https://www.ets.org/mft/about/content/economics> . Keep in mind that you will have 90 questions in the two hours of the actual MFT.

For more practice you can use the Econ GRE practice books on reserve in Penrose. Go to the "course reserves" link and enter "GRE/MCAT" for the course. You'll find three Econ GRE items there, and you can photocopy some sections from these if you want to actually do some of these questions for practice, and even set a two-hour time limit for 90 questions. However, be aware that some GRE questions are not suitable for undergraduate test-takers, and the questions may be very dated, because ETS has not offered a GRE exam in Economics for many years. Therefore, if you use these, do so only to get practice with a multiple choice test format. For purposes of studying material, your notes and books from the core courses are better resources.

- 5) Familiarize yourself with the format of the oral exam. Specifically, practice drawing and explaining graphs. Get your study group to ask you questions that you answer while drawing on a chalkboard. Return the favor for them. Coming up with a set of questions (and follow-up questions) that you ask them will help you study.

**The Major Field Test in Economics**

All senior Economics and Economics-Combined major students must take the Major Field Test (MFT) in Economics. This two-hour test will be administered on the afternoon of Saturday, February 24, 2018 in Olin 138. Students should arrive at 1:30 pm, and bring a photo ID and pencils. Calculators are not allowed. The exam will start at 2:00 pm. You must register for the exam and submit your payment (\$35 cash or check) to the Whitman College Business Office in room 233 of Memorial Building by Friday, December 8, 2017, the last of day of fall semester classes. Students for whom the fee is an undue financial burden should discuss this with their major adviser, who will bring the issue to the department. The department allocates some portion of alumni gifts and its own funds to cover waivers in the case of financial hardship. If you need special accommodations for the exam, contact Kathy Gifford, Director of Testing ([kathygifford03@gmail.com](mailto:kathygifford03@gmail.com)) no later than December 8, and also copy to Professor Hazlett ([hazlett@whitman.edu](mailto:hazlett@whitman.edu)).

## Test Content – Economics

The Major Field Test in Economics contains 90 multiple-choice questions, some of which are grouped in sets and based on such materials as diagrams, expository paragraphs, sets of equations and tables of data. Departments or schools choose when and where to administer the tests. This test must be given by a proctor. It is designed to take two hours. The content categories and approximate distribution of questions among them are outlined below.

### I. Introductory Concepts (1–4%)

- A. Scarcity
- B. Production possibilities
- C. Opportunity cost
- D. Incentives and property rights
- E. Economic modeling
- F. Positive and normative statements

### II. Microeconomics (42–47%)

- A. Supply and Demand
  1. Market equilibrium
  2. Consumer and producer surplus
  3. Comparative statics
- B. Elasticity
  1. Demand elasticity (price elasticity; income elasticity; cross-price elasticity; price elasticity, marginal revenue and total revenue)
  2. Supply elasticity
- C. Consumer Theory
  1. Utility function and indifference curves
  2. Budget constraint
  3. Utility maximization
  4. Income and substitution effects
  5. Individual and market demand
- D. Production Theory
  1. Production Function (short-run; long-run)
  2. Accounting vs. Economic Costs
  3. Short-run costs
  4. Isoquant and isocost analysis (cost minimization; effects of changes in factor prices; factor substitution)
  5. Long-run costs (returns to scale; returns to scope)
- E. Market Structures
  1. Theory of the firm and transactions costs
  2. Profit maximization
  3. Perfect competition
  4. Monopoly
  5. Monopolistic competition
  6. Oligopoly and game theory
  7. Efficiency and welfare
- F. Factor Markets
  1. Marginal revenue product and labor demand
  2. Labor supply
  3. Labor markets (competitive market; monopsony)
  4. Capital market (physical capital; financial capital; present value)
  5. Economic rent
  6. Income distribution

- G. General Equilibrium and Welfare Analysis (Edgeworth Box; Pareto Optimality)
- H. Market Failure and Government Intervention
  1. Price ceilings and price floors
  2. Taxes and subsidies
  3. Regulation and anti-trust laws
  4. Externalities
  5. Public goods
  6. Public Choice Theory
  7. Equity and redistribution
- I. International Trade
  1. Absolute and comparative advantage
  2. Trade restrictions – tariff and nontariff
- J. Information Economics
  1. Risk and uncertainty
  2. Asymmetric information

### III. Macroeconomics (38–43%)

- A. Circular Flow
- B. Economic Measurement
  1. GDP (accounting methods; business cycles)
  2. Price indices and inflation
  3. Real and nominal values
  4. Labor force and unemployment
- C. Aggregate Demand and Aggregate Supply Analysis
  1. Aggregate demand (definition and components of aggregate demand; derivation of aggregate demand)
  2. Aggregate supply (definition of aggregate supply; short-run aggregate supply; long-run aggregate supply)
  3. Macroeconomic equilibrium (wage and price flexibility; role of expectations; Keynesian and Classical analysis; short- and long-run equilibrium; short- and long-run Phillips Curves)

- D. Money and Financial Markets
  1. Definition and role of money
  2. Supply of money (definitions of money supply; commercial banks/financial institutions; central bank functions; deposit creation)
  3. Demand for money
  4. Money market equilibrium
  5. Interest rates and present value
  6. Quantity theory of money
  7. Loanable funds market
- E. IS/LM Analysis
- F. Macroeconomic Policy Analysis
  1. Policy objectives
  2. Fiscal policy
  3. Monetary policy
  4. Economic policy in an open economy
- G. Economic Growth and Development
  1. Sources of economic growth
  2. Solow model
  3. Growth policies
- H. International Finance
  1. Balance of payments accounts
  2. Exchange rates and capital flows (flexible exchange rates; fixed exchange rates)

### IV. Statistics and Econometrics (10–15%)

- A. Concepts of probability
- B. Descriptive statistics
- C. Hypothesis testing
- D. Classic linear regression model (assumptions of estimators; properties of estimators; interpretations of estimators)

### V. Quantitative Analysis (25–35% across all content areas)



#### How scores for the Major Field Test in Economics are reported

**Total Score** – Reported for each student and summarized for the group

**Subscores** – Reported for each student and summarized for the group

- Microeconomics (41)
- Macroeconomics (35)

**Assessment Indicators** – Reported for the group\* only

- Quantitative Analysis (34)
- International Issues (9)

Numbers in parentheses are the approximate number of questions in each category.

\* A minimum of five (5) students is required for assessment indicators to be reported.