

# **Student Learning Assessment Plan**

## **Economics and Management Major 2017-2018**

The mission statement for the economics and management major is consistent with reference to Wells College Mission Statement (p.4, 2017-2018 Catalog) and Wells' Institutional and Academic Program Goals (pp. 9-10, 2017-2018 Catalog).

### **1. Mission of the Economics and Management Major**

The goal of the economics and management major is to provide students with thorough knowledge of basic principles, methods of inquiry and awareness of contemporary issues in economics and business. The faculty presents individual, collective, and business decision-making in domestic, global, and natural contexts aimed at developing students' intellectual curiosity, and analytical and critical capabilities. The curriculum includes core theory courses, cognates emphasizing quantitative skills, and electives in specific fields of the discipline with the conviction that a basic knowledge of economic and business decision-making is essential for numerous purposes. This major is multidisciplinary by nature, serving the needs of numerous other majors and minors.

### **2. Program Goals of the Economics and Management Major**

The program goals include:

1. Develop understanding of the fundamental mechanisms of how an economy works and how the business world functions. Students should become aware of a broad and diverse array of economic and business theories, issues and concerns, and examine underlying policy implications.
2. Develop quantitative skills and problem-solving abilities to comprehend and analyze mathematical and statistical reasoning.
3. Develop the ability to write, speak, and communicate effectively with reasoning, critical analysis and valid arguments.
4. Develop an awareness of the global community, the human relation to the environment, and foster sensitivity to economic, social, biological and cultural diversity.
5. Serve the needs of other majors such as Sustainability, Health Sciences, Business, and International Studies.

### **3. Learning Objective (1.1, 1.2, etc.) and 4. Learning Outcomes (a, b, c, etc.)**

Goal 1. Develop understanding of the fundamental mechanisms of how an economy works and how the business world functions. Students should become aware of a broad and diverse array of economic and business theories, issues and concerns, and examine underlying policy implications.

1.1 Students will be introduced to theoretically diverse approach to economics:

1.1.1 Mainstream economic theories are introduced in Econ 101, 102, 303, and 306, and augmented by weekly sessions conducted by the major's teaching assistant

- a. Theoretical and empirical concepts are introduced by means of lecture and discussion
- b. Students will demonstrate basic concepts and interpretation by means of midterm and final examinations, quizzes and homework assignments

1.2 Heterodox political economy will be introduced in Econ 209, 255, and 340

- a. Theoretical and empirical concepts are introduced by means of lecture and discussion
- b. Students will demonstrate basic concepts and interpretation by means of midterm and final examinations, and by direct questioning in a seminar setting.

1.3 Students will be introduced to the application of theory in Econ 255, 286, 325, 326, 330, 350 and the senior seminar, Econ 402.

- a. Theoretical and empirical concepts are introduced by means of lecture and discussion
- b. Students will demonstrate basic concepts and interpretation by means of midterm and final examinations (in-class and take-home), quizzes, homework assignments, in-class debates and position papers.

Goal 2. Develop quantitative skills, technical competency, and problem-solving abilities to comprehend and analyze the economy by means of mathematical and statistical reasoning.

2.1 Require basic mathematical competency by requiring courses in mathematics and mathematical economics:

- a. Require both statistics (Math 151 or 251) and calculus (Math 111)
- b. Students will demonstrate basic competency through examinations, quizzes, and homework problems, as per the standards of Mathematical and Physical Sciences, and be able to actually solve mathematical problems by various methods

2.1.1 Develop analytical mathematics (algebra, calculus, geometry) as applied to economic modeling in courses such as Econ 101, 102, 209, 286, 325, 326, 303, 306, 330, and 350.

- a. Students are assessed on examinations that include:

- b. Formalizing social problems into functions
- c. Calculations
- d. Interpretations of the results

2.2 Students will be introduced to stochastic and statistical modeling:

- a. Math 151, Econ 302, 303, 306, 314, 402
- b. Students are examined by diverse methods, including homework problems, in-class examinations, take-home examinations, quizzes, senior thesis, etc.

2.3 Graduate school preparation:

- a. Students who desire entering graduate programs in economics are encouraged to take additional courses in economics including integral and multivariate calculus, linear algebra, differential equations, advanced statistics and probability theory, as well as operations research. (Math 112, 211, 212, 213, 251, 300, 305)
- b. Students will be assessed as per the standards of the Mathematical and Physical Sciences major.

Goal 3. Develop the ability to write, speak, and communicate effectively with reasoning, critical analysis and valid arguments

3.1 Seminar style classes:

3.1.1 The economics faculty expects students to show up, having read the assignment or done the homework since the previous class.

- a. Students are asked pointed questions about recalling and interpreting the meaning of the day's assignment,
- b. Students are expected to relate the current topic to prior topics
- c. Students are expected to engage in debate with one another.

3.2 Written exams and position papers:

3.2.1 Students take written take home exams and in-class exam

3.2.2 Students are required to write in a literate and timely manner.

- a. Professor comments provide feedback
- b. Students are allowed to resubmit a corrected essay
- c. Economics faculty members will not read essays not corrected for spelling and grammar

3.3 Senior Seminar:

3.3.1 Conference-style presentations of journal articles

- a. Students give and receive criticism of their work
- b. Students formally write up journal article and presentation

3.3.2 Comprehensive examinations require written answers to both focused and broad-based questions

- a. Graded by faculty using local rubric and results from past 27 years of student performance
  - b. Used as one criterion for determining Distinction in the major
- 3.3.3 Senior thesis:
- a. Students must adhere to deadlines for components of thesis (topic, annotated bibliography, prospectus, and preliminary draft), etc.
  - b. Thesis subject to multiple revisions
  - c. Several in-class preliminary presentations
  - d. Final public presentation

Goal 4. Develop an awareness of the global community, the human relation to the environment, and foster sensitivity to economic, social, biological and cultural diversity.

4.1 Global, social and economic issues:

4.1.1 Economic growth and development

4.1.1.1 Can we end poverty without economic growth?

4.1.1.2 Can a system in overshoot grow its way into sustainability?

4.1.1.3 Classes in which topic is covered: Econ 209, 255, 340, 350

- a. Students are tested on the material by written exams or activism projects
- b. Students may revise work for resubmission

4.2 International Trade and Commerce:

4.2.1 Should trade barriers be reduced or markets protected?

4.2.2 What are the economic consequences of “free trade” for poor countries?

4.2.3 Classes in which topics are covered: Econ 255, 330, BUS 220

- a. Students are tested on the material by written exams or activism projects
- b. Students may revise work for resubmission

4.3 The multinational corporation (MNC):

4.3.1 How is the MNC structured?

4.3.2 What are the economic connections between the MNC and global finance?

4.3.3 What are the effects of multinational investment on developed and less developed countries?

4.3.4 What are the effects of wage arbitrage and global technological change?

4.3.5 Classes in which topics are covered: Econ 209, 255, 330, BUS 220

- a. Students are tested on the material by written exams or activism projects
- b. Students may revise work for resubmission

4.4 The human relation to the environment:

4.4.1 Economic growth and nature’s limits

4.4.2 Systems theory: boundaries, throughput, and feedback mechanisms

4.4.3 Potential environmental consequences of continued economic growth

4.4.4 Potential social and cultural consequences of degrowth

4.4.5 Classes in which topics are covered: Econ 209, 325, 326, 330

- a. Students are tested on the material by written exams or activism projects
- b. Students may revise work for resubmission

#### 4.5 Social, Cultural, and Economic Issues, and Biodiversity:

4.5.1 Upon which pillars must a sustainable society be built?

4.5.2 How do we get there from here?

4.5.3 Classes in which material is covered: Econ 209, 325, 326, 350, BUS 220

- a. Students are tested on the material by written exams or activism projects
- b. Students may revise work for resubmission

Goal 5. Serve the needs of other majors such as Sustainability, Health Sciences, Business, and International Studies.

#### 5.1 Sustainability:

5.1.1 Economics courses as part of major

5.1.2 Econ 102 (Principles of Microeconomics), Econ 209 (Political Economy), Econ 255 (The Political Economy of Globalization), Econ 325 (Ecological Economics), Econ 326 (Energy and the Economy)

5.1.3 Measurement:

- a. Students fulfill requirements
- b. Students acquire valuable information

#### 5.2 Business:

5.2.1 Economics courses as part of major

5.2.2 Econ 101, 102, 286 (Money, Banking and Capital Markets), 302 (Managerial Economics), 330 (The World Economy: Trade and Finance)

5.2.3 Professor Uddin teaches BUS 220 (International Business)

5.2.4 Measurement

- a. Students fulfill requirements
- b. Students acquire valuable information

#### 5.3 International Studies and Political Science:

5.3.1 Economics courses as part of the major

5.3.2 Econ 209, 255, 330, 350 (Economics of Less Developed Countries)

5.3.3 Measurement

- a. Students fulfill requirements
- b. Students acquire valuable information

#### 5.4 Health Sciences:

5.4.1 Economics courses as part of the major

5.4.2 Econ 333 (The Economics of Health and Medical Care)

5.4.3 Measurement

- a. Students fulfill requirements
- b. Students acquire valuable information

#### 4. Measurable Learning Outcomes

Assessment of outcomes will take place through various means as stated below.

1. Fulfill rigorous set of prerequisites: MATH 111: Calculus I; MATH 151: Elementary Statistics; and MATH 251: Probability and Statistics I. These are completed by the Junior year.
2. Examinations, quizzes, homework sets, and projects which demonstrate integration of quantitative and written logic, and analytical and critical thinking skills.
3. Written work, e.g., term papers, essays, position papers, etc. to demonstrate scholarly knowledge, research capability and awareness of contemporary issues in the field. Students are expected to understand the departmental “Guidelines for Research Papers” provided to them with relevant course syllabi.
4. Class presentations, discussions and debates to demonstrate verbal skills and technological competence, to communicate reasoned point of view, and engage in collaborative practices in the classroom.
5. Performance in internships: Internships are administered in all 4 years of study, Freshman through Senior year. Interns’ written work (e.g., paper, journal, project, etc.) and on-site sponsor ratings are indicators of achievement.
6. Comprehensive Exam: A six hour written examination (given in two separate three-hour sessions) is taken in the spring semester of the senior year. The comprehensive questions and problems are drawn from all required courses and successful completion of the exam indicates that students have mastered a wide and diverse range of courses with technical precision. Students who have gone on to graduate school tell us that the level of preparation necessary for the comprehensives gives them an advantage in their graduate studies.
7. Senior Thesis Project: All students in the major conduct an independent project under the guidance of an economics and management faculty as required under Senior Seminar course (ECON 402) demonstrating original research, application of theories and models, estimation of results and their analysis, and reaching policy implications. Students must utilize professional journals as part of their research and writing, not just textbooks and websites.
8. Oral Presentation: All students are required to present their senior thesis work once in class (ECON 402) and once in public to the Wells community. They are also required to take questions and criticisms in public. Being prepared to “think on one’s feet” in public is an essential skill for the professional world of business as well as post-graduate academic pursuits.

9. Performance of students after graduation: job placement and graduate school placement rates. This year one of our graduating seniors will attend graduate school and another will seek employment in the actuarial industry.

## **5. Means of Assessment of Outcomes**

The following will be used as standards for the assessment outcomes listed above.

1. Course grades: Economics and Management majors should earn grades of “C” or better in courses that constitute the major curriculum. A grade of C reflects at least a superficial descriptive sense of how the economy operates. While our majors meet this criterion an increasing number of students in other majors, who take but one or a few courses, do not so meet this goal. We, however, do not wish to “dumb down” the subject matter so any student can pass the course with a minimal amount of work.
2. Senior thesis project: Economics and Management majors should design and execute an original research project. The project must include a clear thesis statement, a literature review, the gathering and interpretation of empirical evidence, and a conclusion. The quality of the project is assessed quantitatively in the final grade assigned for the senior seminar course.
3. Oral presentation: Economics and Management majors should deliver a senior thesis presentation to the Senior Seminar (ECON 402) class. Subsequently they must deliver a revised presentation to the Wells community that is judged to be satisfactory by the Major faculty.
4. Comprehensive exam: Majors should earn a satisfactory grade in this exam. A grade of “Pass” or a “Pass with Distinction” is assigned based on students’ performance in this exam.
5. Employment after graduation: Graduates’ job placement and occupational success should be an indicator of assessment outcome. These data are kept on the department level whenever possible, and should be kept on the institutional level, for example by the alumnae office.
6. Graduate school placement and completion rates should be a benchmark for assessment outcome. These data are partially compiled on the department level and should be kept institutionally.

## **6. How Assessment Data Will Be Utilized**

Economics and Management faculty will meet bi-annually in the spring and fall semesters to discuss and evaluate assessment outcomes. The faculty will go over assessment outcomes from the previous year in order to overview student performance in each of assessment areas presented

above. This can be accomplished by using devices such as transcripts, records of student performance in certain course elements, samples of senior thesis projects and comprehensive exams, discussion of senior thesis oral presentations, and evidence of graduates' performance in employment and in graduate schools. Success in graduates' employment careers and in graduate schools should become apparent in 3 to 5 years after the graduation of a student. The Office of Alumni Relations will be called upon to furnish us with information in this regard. We will pay special attention to the 100-level courses to see if the reduced class sizes have a positive result on learning outcomes.

Our bi-annual meetings will provide us with an opportunity to review all aspects of student performance stated above under **Means of Assessment of Outcomes**. Examined individually and collectively, the assessment tools should help us evaluate whether our graduates can think, act and communicate as well-informed, intelligent citizens on economic and business issues, principles, methods and policies.

Some important curricular changes, modifications and adjustments have been made in the Economics and Management program to meet the needs and requirements of newly introduced majors (e.g., Business, Sustainability, and Environmental Science) and minors (e.g., Healthcare Management, and Business and Management) and to develop increased awareness of the global environment as well as to foster sensitivity to economic, sociopolitical, biological and cultural diversity. We also plan on continuously adapting our courses to the ever-changing reality of the world economy.

- The course descriptions for Economics 101 (Principles of Macroeconomics) were rewritten and the description for Econ 350 (Economics of Less Developed Countries) will be rewritten to reflect changes in the world economy and the development of new theories.
- Economics 326 (Energy and the Economy) was changed to accommodate the second edition of the course text. Changes include updates to the contemporary history of energy chapter to include the recent decline in world oil prices. Also a unit will be added on hydraulic fracturing, an additional unit on the role played by fossil fuels in the industrial revolution, and the latest methods and protocols for assessing energy returns on investment. In addition, chapters added on planetary boundaries and climate change were treated far more thoroughly.
- Economics 314 changed from a 4-credit course to a 3-credit course to reflect the amount of information actually delivered as the scope of the course changes, as well as to reflect the current practice of other institutions.
- The major now offers two Principles sections per semester to ameliorate the consistently large class sizes (in excess of 50 students) of the past three years.