## Cover Sheet: Request 11339

## Modifications to Economics Major

| Info |
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| Process Major Curriculum\|Modify/Ugrad/Pro <br> Status Pending <br> Submitter Knight, David T thomas.knight@ufl.edu <br> Created $12 / 7 / 2016 ~ 11: 18: 00$ AM |
| Updated | 3/14/2017 2:17:37 PM | Description |
| :--- |
| of request | | The Department of Economics proposes the expansion of the set of economics |
| :--- |
| courses that meet its Required Upper-Level Coursework requirement. The |
| department proposes to allow all 3,000-/4,000-level courses with an ECO, ECP, or |
| ECS prefix to satisfy this requirement. The only three exceptions will be ECO 3101, |
| ECO 3203, and ECO 4941. |

## Actions

| Step | Status | Group | User | Comment | Updated |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Department | Approved | CLAS - <br> Economics <br> 011643001 | Knight, David <br> T |  | $12 / 7 / 2016$ |
|  |  |  |  |  |  |
| No document changes |  |  |  |  |  |


| Step | Status | Group | User | Comment | Updated |
| :---: | :---: | :---: | :---: | :---: | :---: |
| College | Recycled | CLAS - College of Liberal Arts and Sciences | Pharies, David A | This item has been conditionally approved by the CCC. Please respond to the following comments. <br> UCC1 form: Under "Proposed Changes", you mention all 3000/4000 courses "with the sole exception of ECO 4941". Elsewhere in the document it is stated that ECO 3101 and 3203 are exceptions as well. <br> UCC1 form: Under Assessment Data Review, you mention "unfamiliar social interactions". Please clarify. <br> UCC1 form: Under Pedagogical Rational, you mention that "students would be able to count AEB 3450 and ECO 4111". We think the latter is a typo. <br> Tracked changes: <br> There is a notation on ECO 2013 "Complete ECO 3101 soon". Change to "Complete ECO 3101 early in the sequence" <br> Tracked changes: <br> Delete "Possible economics elective courses include:" and the entire list. (Since the list it is not complete, it is likely to be rejected by the UCC.) <br> Tracked changes: <br> Replace "Students may substitute an approved course taught outside the department for one economics elective course. Approved outside substitutes include:" with "Students may also take one of the following as part of the $15-16$ credits of electives:" | 1/11/2017 |


| Step | Status | Group | User | Comment | Updated |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Department | Approved | CLAS Economics 011643001 | Knight, David T | The Department of Economics has carefully addressed each of the concerns of the CLAS curriculum committee. | 2/1/2017 |
| Replaced EconomicsMajorCatalog.docx |  |  |  |  | 1/11/2017 |
| College | Approved | CLAS - College of Liberal Arts and Sciences | Pharies, David A |  | 2/1/2017 |
| No document changes |  |  |  |  |  |
| University Curriculum Committee | Comment | PV - University Curriculum Committee (UCC) | Case, Brandon | Added to the March agenda. | 2/27/2017 |
| No document changes |  |  |  |  |  |
| University Curriculum Committee | Pending | PV - University Curriculum Committee (UCC) |  |  | 2/27/2017 |
| No document changes |  |  |  |  |  |
| Office of the Registrar |  |  |  |  |  |
| No document changes |  |  |  |  |  |
| Student Academic Support System |  |  |  |  |  |
| No document changes |  |  |  |  |  |
| Catalog |  |  |  |  |  |
| No document changes |  |  |  |  |  |
| Academic Assessment Committee Notified |  |  |  |  |  |
| No document changes |  |  |  |  |  |
| College Notified |  |  |  |  |  |
| No document changes |  |  |  |  |  |

## Major|Modify_Curriculum for request 11339

## Info

Request: Modifications to Economics Major
Description of request: The Department of Economics proposes the expansion of the set of economics courses that meet its Required Upper-Level Coursework requirement. The department proposes to allow all 3,000-/4,000-level courses with an ECO, ECP, or ECS prefix to satisfy this requirement. The only three exceptions will be ECO 3101, ECO 3203, and ECO 4941.
Submitter: Knight,David T thomas.knight@ufl.edu
Created: 2/1/2017 1:20:10 PM
Form version: 4

## Responses

Major NameEconomics
Major CodeECO
Degree Program Name Bachelor of Arts
Effective Term Earliest Available
Effective Year Earliest Available
Proposed Changes The Department of Economics proposes three substantive changes to the economics major in the College of Liberal Arts and Sciences. Each is described below.

1) The department proposes accepting all 3,000-/4,000-level courses with an ECO, ECP, or ECS prefix as satisfying the "Upper-Level Coursework" requirement for the economics major, with the exceptions of ECO 3101, ECO 3203, and ECO 4941 (discussed below in item 3). This requirement implies that students must take four courses of economics or economics-related (defined below) coursework at the 3,000-/4,000-level as part of the economics major. Currently, only courses that are listed under "Required Upper-Level Coursework" satisfy this requirement. Until recently, this list included all 3,000-/4,000level courses with an ECO, ECP, or ECS prefix, except ECS 4110, ECS 4111, and ECO 4956. The department, however, has recently added a number of new courses that should satisfy this requirement. These new courses include ECO 4401 (Mathematical Economics), ECO 4421 (Econometrics), and ECO 4708 (Economics of Competitive Strategy). The proposed new language incorporates these new courses into the major and affords the department the ability to continue increasing the curricular options for its majors.
2) The proposed new language also treats ECS 4110, ECS 4111, and ECO 4956 as equal to all other 3,000-/4,000 level economics courses. Currently, only one "economicsrelated" course from the following list can be counted toward the "Required Upper-Level Coursework" requirement: AEB 3450, AEB 4274, AEB 4931, ECO 4956, ECS 4110, ECS 4111, FIN 3403, and GEO 3502. The Department of Economics believes that ECS 4110, ECS 4111, and ECO 4956 should not be subject to this restriction. ECS 4110 and ECS 4111 are upper-level economics courses. ECO 4956 is used to allow approved courses taken while studying abroad to count toward the "Required Upper-Level Coursework" in the economics major. ECO 4956 equivalency is subject to review by the department in accordance with the UF International Center's academic advising process for study abroad.
3) We propose removing ECO 4941 (Economics Internship) from the list of courses that satisfy the "Required Upper-Level Coursework" requirement.
Pedagogical Rationale/JustificationThe proposed revisions allow new 3,000-/4,000level economics courses (e.g., ECO 4401: Mathematical Economics, ECO 4421: Econometrics, and ECO 4708: Economics of Competitive Strategy) to satisfy the "Required Upper-Level Coursework" requirement in the economics major. These new
courses add breadth to the department's undergraduate offerings, and including them within the major will increase student choice. Additionally, including these courses would enhance the academic and professional development offered within the economics major.

The Department of Economics believes that removing the outside-of-department restriction from ECS 4110 and ECS 4111 will allow students interested in sustainability and development to craft a more tailors major experience. For example, students would be able to count AEB 3450 and ECS 4111 within their economics major.

Lastly, the motivation for removing ECO 4941 from the economics major is actually to facilitate the ability of student to receive academic credit for economics-related internships. Historically, if a student wished to enroll in ECO 4941, the Department of Economics required that the student demonstrate that the internship included similar exposure to and practice with economic modelling as a 3,000-/4,000-level economics course. This approach was taken, because the ECO 4941 credit would satisfy one-fourth of the "Required Upper-Level Coursework" requirement, and the department wanted to ensure that students majoring in economics were able to sufficiently develop the knowledge and skills offered by the major. In practice, meeting the threshold of "similar exposure to and practice with economic modelling as a 3,000-/4,000-level economics course" is incredibly difficult. Employers and internship hosts in economics-related fields rarely provide students in economics internships the opportunity to meet such a strict threshold. Likely, this unfortunate reality is due to widespread belief that "doing economics" requires a Ph.D. in economics -- and more specifically, the technical training contained within that degree program. Removing ECO 4941 from the list of courses that meets the "Required Upper-Level Coursework" requirement for the economics major would allow the department to adopt a more reasonable and attainable threshold for awarding internship credit. In fact, the department is currently beginning the process of developing a formal internship program.

Impact on Enrollment, Retention, GraduationThese is no direct impact on enrollment, retention, or graduation.

In the future, removing ECO 4941 from the economics major will likely increase the number of students that receive credit for ECO 4941.
Assessment Data ReviewEach of the 3,000-/4,000-level economics elective courses (including ECS 4110 and ECS 4111) reinforce and assess the critical thinking and communication SLOs for the economics major:

1) Model and analyze unfamiliar social interactions using a formal economic framework.
2) Communicate effectively the concept of opportunity costs and trade offs.

Students that complete the economics major should be able apply economic methods to various social interactions, even those that they have not encountered in their economics coursework. For example, a student should be able to apply a cost-benefit type of analysis to a personal financial decision (e.g., leasing vs. buying a new car, taking out a student loan). Students should also be able to communicate the associated trade offs and identify the option supported by formal economic analysis.

Thus, the "Required Upper-Level Coursework" requirement within the economics major should include all 3,000-/4,000-level economics courses (i.e., those courses with an ECO, ECP, or ECS prefix) that are not already explicitly required for the economics major. Each of them addresses the SLOs associated with the economics major.

Academic Learning Compact and Academic Assessment PlanNo changes to the Academic Learning Compact or Academic Assessment Plan are required.

## Coursework for the Major

The major requires 37-39 credits. Students must achieve minimum grades of C in each required foundation and economics course, including the economics electives and outside substitutes.

## Required Foundation Coursework

- MAC 2233 Survey of Calculus or MAC 2311 Analytic Geometry and Calculus 1, 3-4 credits
- STA 2023 Introduction to Statistics 1, 3 credits
- ECO 2013 Principles of Macroeconomics, 4 credits ECO 2023 Principles of Microeconomics, 4 credits ECO 3101 Intermediate Microeconomics *, 4 credits, and ECO 3203 Intermediate Macroeconomics, 4 credits
* Complete ECO 3101 soon early in the sequence, because it is a prerequisite for some economics electives.


## Required Upper-Level Coursework

Four economics elective courses (defined as any 3,000-level or 4,000 level course with an ECO, ECP, or ECS prefix; not including ECO 3101, ECO 3203, ECO 4905, or ECO 4941), 15-16 credits.
Course prerequisites are strictly enforced. Possible economics elective courses include:

* ECO 3532 Public Choice
* ECO 3704 International Trade
*- ECO 3713 International Macroeconomics
- ECO 4213 Monetary Economics
=- ECO 4400 Gamo Theory and Applications
- ECO 4504 Public Economics
* ECO 4730 The Firm in the Global Economy
* ECO 4934 Special Topics
*- ECO 4935 Empirical Research in Economics Seminar
- ECP 3006 Economics of Sports

Students may substitute an approved course taught outside the department for one economics
elective course. Approved outside substitutes includeStudents may also take one of the following as part of the 15-16 credits of electives:

- AEB 3450 Introduction to Natural Resource and Environmental Economics
- AEB 4274 Natural Resource and Environmental Policy
- AEB 4931 Agricultural Macroeconomics
* ECO 4956 International Studies in Economics
- GEO 3502 Economic Geography

This substitute cannot double count toward the CLAS 3000-level elective requirement.

## Recommended Coursework

Students planning to pursue graduate study in economics should consider a minor in mathematics or statistics or take the following mathematics and statistics courses:

- ECO 4934 Econometrics or STA 4210 Regression Analysis
- MAC 2311 Analytic Geometry and Calculus 1, MAC 2312 Analytic Geometry and Calculus 2, and MAC 2313 Analytic Geometry and Calculus 3
- MAP 2302 Differential Equations
- MAS 3114 Computational Linear Algebra or MAS 4105 Linear Algebra 1
- STA 4321 Introduction to Probability and STA 4322 Introduction to Statistics Theory. Students taking advanced statistics might not be required to take STA 2023.

