



Proposal / 10579: Change Course: ECO 300 / Change Course

Please fill in every item on the left, then fill out the proposed changes on the right.

Type of Change

Title

Description

How the Course Fits into the Curriculum

Prerequisites

Existing Course Identifiers

Existing Course Prefix and Course Number

ECO 300

Existing Title Catalog Copy

Applied Economic Analysis

Existing Course Description

An introduction to empirical methods in economics and the relevant data sources. Uses spreadsheets and econometric software to apply visual and statistical analyses to social science data. Examines ethical issues involved in research.

Existing Prerequisites

STA 215; ECO 200 or ECO 210 or ECO 211, and admitted to Seidman College of Business or by permit.

Existing Credits

3

Existing Course Attributes

- Elective

Proposed Change(s)

Proposed Title Catalog Copy (100 Characters Max)

Data Analytics for Economics and Business

Proposed Title Transcript Copy (30 Characters Max)

Data Analytics for Econ

Proposed Course Description

An introduction to empirical methods in economics and business. Uses spreadsheets and econometric software to manage data and apply visual and statistical analyses using economics and business data.

Proposed Prerequisites

WRT 150; STA 215; ECO 200 or ECO 210 or ECO 211, and admitted to Seidman College of Business or by permit.

Proposed Course Attributes

- Required for Major

Rationale

1. When should change(s) take effect?

Fall 2019

2. Why are each of these changes necessary or desirable?

We are proposing 5 changes to the course:

- Renaming the Course
- Changing the Course Description
- Replacing the study of ethical issues involved in research with more writing skills development. This includes applying for SWS designation.
- Making the course required for the Economics major.
- Adding WRT 150 as a prerequisite

There are several benefits to these changes. Because of the increasing wealth of data available to businesses "Data Analytics" is becoming a critical business skill. The name change will signal to business majors that the course builds this skill.

We will also be integrating more business applications and examples into the course. The change in the course description reflects this changed emphasis.

Economics is largely an empirical discipline and, while there are multiple statistics and empirical methods courses in our curriculum (including ECO 300, ECO 400 and ECO 495), only one is required (ECO 495). Thus, many students enter ECO 495 with only STA 215 as their statistics background (and in many cases, taken several years prior to ECO 495), while other students have much more experience with empirical methods. Making ECO 300 required in the major will mean that our majors will have a more common experience and ability in empirical methods and their education in such methods will be more "continuous" with required courses at the 200-level (STA 215), the 300-level and the 400-level.

Since students in this course will be working on a large semester-long research project of their own choosing as well as shorter, directed research projects, the course necessarily requires the students to write. Moreover, instruction in the course will include the use of research papers from the literature to introduce and demonstrate how empirical methods are used and presented in the discipline. Thus students will see examples of well-written empirical research. For both reasons the course will "naturally" meet SWS objectives. This will allow the dept to reduce the SWS offerings of ECO 313, which is less of a natural fit for SWS. The WRT 150 prerequisite goes hand-in-hand with this change as it is recommended for SWS courses.

3. Impact on Other Units: Identify any programs that utilize this course, or any programs that have courses that overlap in content with this course. If other programs use this course, contact those programs with a request that they acknowledge and support the changes being proposed. Similarly, if this course overlaps material in another program, specify the nature and degree of the overlap, and explain why it is necessary to add this material rather than to reconfigure existing program offerings. Look for overlap in the online catalog by conducting a "courses - keyword/phrase match" search. Units may enter their comments directly into the on-line system's "Comments" box for this proposal. Alternatively, copies of inter-departmental communication can be attached by the proposer as a "Supporting Document".

Course material overlaps with several other courses that focus in empirical methods. Particularly in the social sciences. However, the proposed changes to ECO 300 do not affect the degree of overlap with any courses. No other programs use ECO 300. The change in emphasis arguably reduces overlap with other social science empirical methods courses because of the change from focusing on ethical issues (covered in some of the other social sciences courses) to an emphasis on writing. The focus on business applications should make the course more a desirable elective to business students.

Here is a list of courses for which some material overlaps with ECO 300. The overlap is mostly in the coverage of the basics of statistical hypothesis testing. But they are all differentiated because each focuses on specific data and empirical issues particular to their own discipline and the non-statistical topics and applications are particular to their discipline. STA 216 is not a social science course and does not focus on specific data issues or research topics specific to economics or business research

- PLS 300
- PSY 300
- PA 300
- CJ 300
- SOC 305
- STA 216

Unit heads have been contacted for each of the courses with a request that they put comments regarding this proposal in SAIL.

4. Explain why/how this is a course change rather than a new course.

Most of the content of the course is unchanged. The changes reflect a change in emphasis on topics within the course. The course always included a research paper, thus writing was always part of the course. By dropping the ethics component, we are now able to put more emphasis on writing. The change from more social science topics to business topics is not a change in the core content, which remains data management, data visualization and statistical analysis.

If this proposal is a part of a larger package of changes (e.g., program change request, new courses, or course changes). You must group all related proposals together in the online system to facilitate review.

Curriculum Resource Statement

Faculty/Staff Resources

Describe how faculty workload will be affected by this proposal.

Most of the content of the course is unaffected by the proposed changes. The title change, we believe, more accurately signals the content to students. The increased focus on writing is simply an adjustment in emphasis rather than whole new content.

The change from a elective within the major to a required course, and the SWS designation, means more sections will be required. The Economics Department current offers 2 sections of ECO 300 per year. The plan is to increase this to 4 sections in 2019 and eventually to 5 sections per year. However, we currently offer ECO 313 an SWS designation. This will stop once ECO 300 has SWS approval. Thus, we will offer fewer sections of ECO 313. We anticipate that, over time, the changes in the economics program will net out to the same number of section offerings per year.

Because we will need more sections of ECO 300, some faculty this will teach ECO 30 as a "new prep". But this is a short-run increase on their workload.

Library Resources

If this proposal requires additional library resources, provide an evaluation of those additional library resources.

The proposal has no implications for library resources

Computer Resources

If this proposal requires additional computer resources, discuss any expansion of existing resources or need for additional resources (lab space, software license, etc.).

The course requires instruction in statistical software. We currently use the software Stata, which is installed on the student network. We use computer labs for instruction and for assignments completed outside of class time. However, once this course is required in the major, we are switching software to R. R is freely available and so our Stata license will not need to be updated--saving money-- and the need for computer lab space for both instruction and for student assignments will be reduced. It is difficult to know exactly how the changes affect computer lab needs as some students may choose to use R in the labs rather than on personal computers.

Classroom Resources

If this proposal requires additional classroom resources beyond the standard room with a lecture computer, projector, and whiteboard, describe any additional classroom resources required for this proposal.

The proposal has no implications for classroom resources beyond the need for computer lab space as described under "Computer Resources."

Equipment Resources (non-computer)

If this proposal requires additional equipment resources (non-computer), provide an evaluation of those additional needed resources with estimated costs.

N/A