Dean Randy Diehl of the College of Liberal Arts has filed with the secretary of the Faculty Council the following changes to the Bachelor of Arts degree with a major in economics in the College of Liberal Arts Chapter in the Undergraduate Catalog, 2010-2012. The faculty of the college and the dean approved the changes on August 14, 2009. The secretary has classified this proposal as general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the change on November 4, 2009, and forwarded the proposed changes to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the executive vice chancellor for academic affairs.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty on November XX, 2009.

Sue Alexander Greninger, Secretary
The Faculty Council

This legislation was posted on the Faculty Council Web site (http://www.utexas.edu/faculty/council/) on October 8, 2009.
CHANGES TO THE BACHELOR OF ARTS DEGREE WITH A
MAJOR IN ECONOMICS AND IN THE
ECONOMICS HONORS PROGRAM IN THE
COLLEGE OF LIBERAL ARTS CHAPTER OF THE
UNDERGRADUATE CATALOG, 2010-2012

NAME OF DEGREE PROGRAM(S):
I. Bachelor of Arts with a major in Economics
II. Economics Honors Program

EXPLAIN CHANGE(S) TO DEGREE PROGRAM:
I. We propose to add Econometrics (Eco 341K) to the set of upper-division economic courses required for the Economics major, increasing the hours required for the major from 25 hours (including 19 upper-division) to 28 hours (including 22 upper-division). We also propose to change the math requirement economics major. Finally, we will now allow a C- in all 28 hours of required Economics courses rather than the previous grade of C in 16 hours of ‘core’ Eco courses; hence, we are adding a statement clarifying the minimum grade point average required for the major.

A. Econometrics (Eco 341K) is the sequel to Economic Statistics (Eco 329). Previously, it was an upper-division elective. Under the proposed change, it will be an additional required core economics course.

B. The math department offers two calculus sequences: Math 408C/D, and Math 408K/L/M. The latter sequence covers essentially the same material as the former, but in three semesters. Previously, the B.A. in Economics required either sequence in its entirety. Under the proposed change, an economics major must take either Math 408C/D (as before), or Math 408K/L (eliminating the third course in the sequence, Math 408M), or the equivalent.

C. We are adding statements that 1) students must still achieve a grade point average of 2.00, the College’s minimum standard (printed on page 316 under Bachelor of Arts, Plan I), in all courses counted for the major, and 2) at least a C- is required in every course counted toward the major rather than just the 16 hours of core courses.

II. Increasing number of hours required for earning departmental honors in economics by three hours, from 31 to 34 hours.

Indicate pages in the undergraduate catalog where changes will be made: pages 321 and 307

GIVE A DETAILED RATIONALE FOR CHANGE(S):
I. At present, the requirements for the major are:
   1. Two introductory economics courses (Eco 304K/L)
   2. Math (Math 408C/D or Math 408K/L/M)
   3. Two upper-division theory courses (Eco 420K, Eco 320L)
   4. Upper-division statistics (Eco 329)
   5. Three (9 hours) upper-division economics electives (at least two must have Eco 420K as a prerequisite)
   6. Grade of at least C in Eco 304K, 304L, 420K, 320L, and 329 (16 hours of Eco core), and a grade point average of at least 2.00 for Eco major courses excluding 420K, 320L, and 329.

The following changed requirements are proposed:
   2. Math (Math 408C/D or Math 408K/L, omitting Math 408M)
   4. Two upper-division statistics/econometrics courses (Eco 329 and Eco 341K)
   6. C- in every course counted for the major, and a grade point average of at least 2.00 for all courses counted for the major.

With the proposed change in the math requirement, all economics majors will be able to start taking their upper-division core theory and statistics courses after two semesters of introductory economics and math. The one topic from Math 408M that is necessary for the economics major (constrained optimization) will be taught in Microeconomic Theory (Eco 420K). The proposed addition of Econometrics (Eco 341K) as a requirement will increase the statistics skills of economics majors substantially. The net addition of three upper-division credit hours
is consistent with major requirements at many other top universities. Here is a brief discussion of each of these aspects of the proposed changes.

Change in the math requirement
Students must complete their math requirement before starting the required theory sequence, consisting of Microeconomic Theory (Eco 420K) and Macroeconomic Theory (Eco 320L). Microeconomic Theory is required for Macroeconomic Theory, and for the majority of upper-division economics electives, including Econometrics. Macroeconomic Theory is required or useful for several popular electives. Econometrics is useful for reading empirical research in economics, and it greatly increases the set of possible research topics an economics major can tackle. Taking Microeconomic Theory in the third rather than fourth semester will provide more room in students’ schedules to take advanced electives, and to benefit from having taken Econometrics.

Constrained optimization is the only topic in Math 408M that is used in Microeconomic Theory and Macroeconomic Theory. All instructors of Microeconomic Theory were consulted, and they agreed to incorporate this topic formally. Many instructors of Microeconomic Theory already review constrained optimization when using it. Therefore, very little adjustment to the content of Microeconomic Theory will be necessary to ensure that the same mathematical material is learned by economics majors as before. No microeconomics topics will be displaced, and the mathematical level of Microeconomic Theory will not be affected.

About half of economics majors now satisfy their math requirement by taking the three-semester sequence (Math 408K/L/M) rather than the equivalent two-semester sequence (Math 408C/D). This is a significant number of students who will benefit from being able to start Microeconomic Theory one semester earlier.

Adding Econometrics (Eco 341K) as a major requirement
Even one course in econometrics (following statistics) makes a big difference to a student’s understanding of how economists measure various aspects of economic behavior that are important for understanding economic policies, business cycles, growth, and other aspects of the world. Econometrics also gives students the statistical tools needed to explore relationships among economic variables in methodologically sound ways. These skills are useful as an undergraduate, in courses and when doing research, and after graduation, in jobs and graduate school.

In the past several years, a number of excellent and user-friendly statistical and computational packages for personal computers have become available, including Minitab, Matlab, and Mathematica. This alleviates the constraint that historically was imposed by computer lab space, and lab supervision and assistance.

The faculty needed to teach additional sections of Econometrics will be moved over from teaching Economic Statistics (Eco 329), which will now be taught in large sections.

The department unanimously voted for this plan in preference to the status quo. We considered changing Economic Statistics to a four-credit course as an alternative way of giving economics majors more training in statistics and econometrics. The department also unanimously preferred the proposed addition of an Econometrics requirement to this alternative.

Increase of three required credit hours of economics
The proposed change adds Econometrics (Eco 341K) as a requirement. We view this as an increase in the quality of the major. The resulting number of required credit hours is in line with economics majors at many top universities. The impact on the feasibility of double majors and dual degrees was an important consideration. The business school is implementing an analogous change, so economics majors doing a dual degree with the business school will not be adversely affected (they’ll be able to use one Econometrics course for both degrees). Double majors/dual degrees with other departments should still be able to accommodate both of their majors, because the number of required credit-hours is not large, and the revised math requirement will give them more flexibility to plan.

Changes to major grade point average and grade requirements
When the grade requirement for core Eco courses was a C, with a g.p.a. of 2.00 required in the additional 9 hours of upper-division Eco and Eco 304K/L (15 hours total), it was guaranteed that a student would meet the minimum 2.00 major g.p.a. required to earn a Bachelor of Arts. Now that the grade requirement in the 19 hours of core Eco courses has dropped from a C to a C-, a student who earned C- in each core course would be far from the required 2.00. With this in mind, the department Chair and the Director of Undergraduate Studies have agreed that a statement should be added restating that a student must still earn a 2.00 major GPA in order to graduate, and that in addition to the C- minimum in core courses, a C- will now be required in all Eco elective courses counting for the major as well.
II. The major in Economics is adding ECO 341K Econometrics to the list of required core Economics coursework and increasing requirements in the major by three hours. In light of the increase in major hours, our faculty also wishes to raise the minimum requirement for earning honors in economics, which are in addition to the requirements of the major.

SCOPE OF THE PROPOSED CHANGE(S):

Does this proposal impact other colleges/schools? If yes, then how?

Under the proposed changes, some economics majors who would have taken Math 408C/D under the 2008-10 catalog will choose to take Math 408K/L instead. In order to estimate how this will affect enrollments in Math 408C/D and Math 408K/L/M, we examined historical data on how economics majors have satisfied their math requirement (which math sequence, whether they transferred credit for part or all of it, etc.). These data suggest that annual enrollment in Math 408C/D will decrease by about 200, annual enrollment in Math 408K/L will increase by about 200, and annual enrollment in Math 408M will decrease by about 110. We expect these impacts as of the fall 2010 semester.

Has the other college(s)/school(s) been informed of the proposed change? If so, please indicate their response.

Yes.

Person communicated with: Dr. Kathy Davis, Undergraduate Advisor, Department of Mathematics

Date of Communication: May 1, 2009; email from Dr. Valerie Bencivenga, Director of Undergraduate Studies

At an early stage of discussion about possible changes to requirements for the economics major, a working group from the economics department met with Kathy Davis. The math department has been aware of the possible changes we are proposing for more than a year. Kathy did not reply to the email confirming that the economics department had decided to propose changing the math requirement as described here. David Laude said in the November 4, 2009, CUDPR meeting that Bill Beckner, chair of the math department, had agreed to the proposed changes.

Will this proposal change the number of required hours for degree completion? If yes, please explain.

No.

Does this proposal involve changes to the core curriculum (42-hour core, signature courses, flags)?

No.

COLLEGE/SCHOOL APPROVAL PROCESS:

Departmental Approval Date: April 17, 2009 (November 17, 2009 for G.P.A. changes)

College Approval Date: August 14, 2009 (November 17, 2009 for G.P.A. changes)

Dean Approval Date: August 14, 2009 (November 17, 2009 for G.P.A. changes)

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Economics

All economics majors must earn grades of at least \([C] \) in either Mathematics 408C and 408D or Mathematics 408K and 408L, and Mathematics 403K and 403L (and transfer equivalents) may not be substituted for the required math courses.

Major: Twenty-five Twenty-eight semester hours of economics, consisting of Economics 304K, 304L, 420K, 320L, 329, 341K and nine additional hours of upper-division coursework. At least six of the additional hours of upper-division coursework must be in courses for which a grade of at least \([C] \) in Economics 420K is a prerequisite. Economics 420K, 320L, and 341K must be completed in residence. Economics majors must take Economics 420K at least two semesters prior to completion of the degree. Students may not enroll in Economics 420K more than twice.

All economics majors must earn a grade of at least \([C] \) in each course counted toward fulfillment of the major requirements. \([Economics 304K, 304L, 420K, 320L, and 329, Furthermore, all economics majors must earn a grade point average of at least 2.00 in all economics courses (excluding Economics 420K, 320L, and 329) taken at the University and counted toward fulfillment of the major requirement] A minimum grade point average of at least 2.00 for all courses taken at the University and counted toward the major is also required.

No student may register for more than ten semester hours of economics in any one semester without approval of an undergraduate adviser in the Department of Economics.
Economics Honors Program

Majors who plan to seek special honors in economics must apply to the honors adviser for admission to the honors program before the first registration period for the first semester of their senior year. Students are encouraged to apply by the beginning of the first semester of their sophomore year, so that they will be eligible to take an honors section of Economics 420K. A University grade point average of at least 3.00 and a grade point average in economics of at least 3.50 are required for admission. Before a student registers for Economics 378H, the student’s thesis proposal must be approved first by the supervising instructor and then by the honors adviser. The requirements for graduation with special honors are (1) at least thirty-one semester hours in economics; (2) Economics 378H, Honors Tutorial Course I, and 379H, Honors Tutorial Course II, with a grade of at least B in each; (3) a University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors; and (4) completion in residence at the University of at least sixty semester hours of coursework counted toward the degree.