Senate Bill 1112-11

UNIVERSITY SENATE

UNIVERSITY AT ALBANY
STATE UNIVERSITY OF NEW YORK

Introduced by: UAC

Date: March 5, 2012

REVISIONS TO BACHELOR OF ARTS IN ECONOMICS PROGRAM

IT IS HEREBY PROPOSED THAT THE FOLLOWING BE ADOPTED:

1. That this takes effect for the spring 2012 semester.

2. That this proposal be forwarded to President George M. Philip for approval.
## College of Arts and Sciences  
### Course and Program Action Form

<table>
<thead>
<tr>
<th>Proposal No.</th>
<th>11-049</th>
</tr>
</thead>
</table>

- **Please check one:**  
  - □ Course Proposal  
  - □ Program Proposal

### Please mark all that apply:

- [ ] New Course
- [ ] Cross-Listing
- [ ] Shared-Resources Course
- [ ] Deactivate/Activate Course (boldface & underline as appropriate)
- [x] Other (specify): Revision of Economics BA Program

### Department: Economics  
### Effective Semester, Year: Spring, 2012

<table>
<thead>
<tr>
<th>Course Number</th>
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<th>Credits:</th>
</tr>
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<table>
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<th>Course Description to appear in Bulletin:</th>
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<table>
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<tr>
<th>Prerequisites statement to be appended to description in Bulletin:</th>
</tr>
</thead>
</table>

### If S/U is to be designated as the only grading system in the course, check here: 

### This course is (will be) cross listed with (i.e., CAS ####):

### This course is (will be) a shared-resources course with (i.e., CAS ####):

### Explanation of proposal:  
Please see explanation following.

### Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offerings:

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### Chair of Proposing Department  
Terrence Kinal  
Date: 6.10.11

### Chair of Academic Program Committee  
Gregory Stevens/Edelgard Wulfert  
Date: 10/26/11
Resource Implications of Proposal for Revision of Bachelor of Arts in Economics
11-049 ECO (OT-Revisions to BA Program)

The major resource implication of the proposal to allow AMAT 101 to satisfy the mathematics requirement for the Bachelor of Arts in economics is that fewer students would take AMAT 106 and more students would take AMAT 101. The Department of Economics has corresponded with the Department of Mathematics on this change and the Department of Mathematics has indicated it is prepared for the changing enrollments as documented in the letter from Prof. Keke Zhu, Chair of the Department of Mathematics. The proposal may also result in additional students seeking the BA major in economics. We anticipate that any year-to-year enrollment increases from the proposal will be small relative to the fluctuations we have experienced in the past. If there are increases in numbers of majors over time, there would be increased enrollments in upper level economics courses after about two years. These increased enrollments could be anticipated from enrollments in principles courses and numbers of intended majors, allowing planning for the increases.
Dear Michael,

We have no problem with your proposal to change the math requirement from AMAT 106 or higher to AMAT 101 or higher. This will likely cause us to shift some teaching resources from 106 to 101 (and possibly 104 and 111), but the overall impact should be small. I will sign the form and send it to you by campus mail today. I am sorry about the delay in getting back to you.

Best regards,
Kehe Zhu
Chair/Department of Mathematics and Statistics

-------- Original Message --------
Subject: Proposal for revision to BA program in economics
Date: Mon, 13 Jun 2011 14:11:01 -0400
From: Michael Sattinger <m.sattinger@albany.edu>
To: <plotnick@math.albany.edu>
CC: Terry Kinal <tk58@albany.edu>, Linda M Gallagher <lgallagher@albany.edu>, Cindy Endres <cendres@cas.albany.edu>

Dear Steve,

Attached is our proposal for a revision to the Bachelor of Arts Economics major, in which AMat101 would be allowed to satisfy the math requirement for the degree.

I understand that you are acting chair of the department during the summer. The College of Arts and Sciences wants the signature of the chair on the program and course forms to show that the mathematics department knows about and approves of the proposed changes. Please let me know if you need more information, there are inaccuracies, or you wish to discuss alternatives. The proposal won't be considered until the fall, so there is plenty of time for discussions.

If you approve the changes, you can send me an email indicating your approval and I will attach the email to the document.

I hope you are having a good summer.
Michael Sattinger
director of undergraduate studies, economics
Proposal for Revision of Bachelor of Arts in Economics Program
June 10, 2011

The Department of Economics offers two undergraduate degrees, a Bachelor of Arts and a Bachelor of Science in Economics. The BA degree is a liberal arts track appropriate for students interested in pre-law, the financial industry, business, government and social sciences in general, while the BS degree emphasizes a more technical preparation for graduate school and professional careers. About one fourth of our majors get BS degrees and three-fourths get BA degrees.

This proposal describes a revision to our Bachelor of Arts Economics Major with the purpose of making the major more open and accessible to students, and making the BA degree more appropriate for the careers and needs of the majority of University at Albany students. The revision would allow BA students to satisfy the mathematics requirement for the major with Mat 101. (There would be no change to the Bachelor of Science economics major.) Currently the mathematics requirement for the BA program is Mat 106, 111, 112, 118, or Eco 210. Most students take Mat 106, Survey of Calculus. The department believes that Mat 101 is more appropriate for our students than Mat 106 because it provides a review of precalculus material and does not include integral calculus, which is less useful for the BA degree. In addition to providing more preparation for calculus, Mat 101 covers limits and derivatives and differentiation rules in calculus. Students who later decide to switch to the BS program will be better off with Mat 101 than Mat 106, since Mat 106 does not contribute to the two-semester calculus sequence needed for the BS program. Students with Mat 101 can take Mat 111 to complete the first part of the calculus requirement without redundancy.

The department believes that the revision will widen the range of opportunities for undergraduates interested in economics while providing an improved educational experience for students choosing the Bachelor of Arts in Economics Major. This proposal addresses the problem that many BA students have difficulty passing Mat 106 in a timely fashion, perhaps unnecessarily discouraging many students from choosing to major in economics, delaying the time when students can take core courses (intermediate microeconomics, Eco 300, intermediate macroeconomics, Eco 301, or Eco 320, economic statistics), and extending the time needed to complete the undergraduate degree. The department continues to encourage students to acquire mathematical knowledge appropriate to their career goals in all programs.

Evidence that the current calculus requirement may be a barrier to choosing economics is provided by the following recent data on the calculus records for our current BA majors.
# Economics Majors in the Bachelor of Arts Program
## Junior and Senior Status

### GPA <2.5

<table>
<thead>
<tr>
<th></th>
<th>less than 2.0</th>
<th>2.0-2.49</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # Students</td>
<td>107</td>
<td></td>
</tr>
<tr>
<td># Students Passed C or better first attempt</td>
<td>53</td>
<td>13</td>
</tr>
<tr>
<td># Students Passed C or better second attempt</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td># Students Passed C or better more than 2 attempts</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td># Students Passed less than C first attempt</td>
<td>24</td>
<td>5</td>
</tr>
<tr>
<td># Students Passed less than C more than one attempt</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td># Students that did not pass</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td># Students currently enrolled in Calc - 1st attempt</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td># Students have not attempted</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

### GPA 2.5+

<table>
<thead>
<tr>
<th></th>
<th>2.5-2.99</th>
<th>3.0+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # Students</td>
<td>153</td>
<td></td>
</tr>
<tr>
<td># Students Passed C or better first attempt</td>
<td>102</td>
<td>59</td>
</tr>
<tr>
<td># Students Passed C or better second attempt</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td># Students Passed C or better more than 2 attempts</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td># Students Passed less than C first attempt</td>
<td>23</td>
<td>21</td>
</tr>
<tr>
<td># Students Passed less than C more than one attempt</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td># Students that did not pass</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td># Students currently enrolled in Calc - 1st attempt</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The data indicate that the current mathematics requirement constitutes a significant and unnecessary hurdle for many students and probably discourages many students from choosing an economics major. The difficulty may arise because many students lack the facility with precalculus that would prepare them for calculus. Mat 101 would solve this problem by providing a review of mathematics before starting on calculus. Mat 101 also provides sufficient coverage of differential calculus so that students will be prepared for the intermediate economics core courses. Allowing Mat 101 to satisfy the mathematics requirement will not require any changes in the content of intermediate core courses, but those courses will also need to be revised to allow Mat 101 to serve as the mathematics prerequisite. Course change proposals for Eco 300, Eco 301 and Eco 320 have therefore been included with this proposal. Also, a course change proposal for Eco 210 is included to prevent students from taking both Mat 101 and Eco 210 for credit.
**Course and Program Action Form**

**Proposal No.** 11-049A

**Department:** Economics  
**Effective Semester, Year:** Spring 2012

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Current: Eco 210</th>
<th>New:</th>
<th>Credits: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Title</td>
<td>Tools of Economics</td>
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<td></td>
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</table>

**Course Description to appear in Bulletin:**

Introduction to some of the basic mathematical tools used in economics, including the construction and comprehension of simple graphs, as well as some of the economist's conceptual tools, including marginal analysis, national income analysis, supply and demand. May not be taken for credit by students with credit for MAT 101, 106, 111, 112, 118, or equivalent.

**Prerequisites statement to be appended to description in Bulletin:**

**Explanation of proposal:**

With the proposal for changes in the Bachelor of Arts program in economics, a MAT 101 would be accepted as satisfying the mathematics requirement for the major. The change for Eco 210 would prevent students from taking Eco 210 after getting equivalent or more difficult material in MAT 101.

**Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:**

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**Approval**

<table>
<thead>
<tr>
<th>Terrence Kinal</th>
<th>6.10.11</th>
<th>Gregory Stevens/Edgeland Wulfert 10/26/11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinka Chatterji</td>
<td>10/21/11</td>
<td>Date:</td>
</tr>
</tbody>
</table>
University at Albany – State University of New York

College of Arts and Sciences  Course and Program Action Form  Proposal No. 11-049B

Please check one:  

- [X] Course Proposal  
- [ ] Program Proposal

Please mark all that apply:

- New Course
- Cross-Listing
- Shared-Resources Course
- Deactivate/Activate Course (boldface & underline as appropriate)

Revision of:  

- Number
- Title
- Credits
- Other (specify):
- Description
- Prerequisites

Department:  

- Economics

Effective Semester, Year:  

- Spring 2012

Course Number  

- Current:  
- Eco 300  
- New:  

Course Title:  

- Intermediate Microeconomics

Course Description: to appear in Bulletin:

- Introduction to price theory, distribution theory, and market structure analysis. Relevance of economic theory in production and consumption decisions. (No change)

Prerequisites statement: to be appended to description in Bulletin:

Prerequisite(s): A ECO 110 with grade of C or better; A ECO 111; and A ECO 210 or A MAT 101, 106, 111, 112, or 118.

If S/U is to be designated as the only grading system in the course, check here:  

This course is (will be) cross listed with (i.e., CAS ###):

This course is (will be) a shared-resources course with (i.e., CAS ###):

Explanation of proposal:

The course proposal would change the list of prerequisites to include A Mat 101 in accordance with the proposal to change the Bachelor of Arts program to allow A Mat 101 to satisfy the mathematics requirement for the major.

Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:

Contact or background information:

Terrence Kinal  

- Date:  

- 6.10.11

Approved by Chair(s) of department having cross-listed course(s)

Signature:

- Date:  

- 7/11/2011

Gregory Stevens/Edelgard Wulfert  

- Date:  

- 10/26/11

Pinka Chatterji  

- Date:  

- 10/21/11

Chair of Associated Undergraduate Department

- Date:  

- Dean of Undergraduate or Graduate Studies

- Date:  

University at Albany – State University of New York

College of Arts and Sciences  Course and Program Action Form  Proposal No. 11-066

Please check one:  X Course Proposal  Program Proposal

Please mark all that apply:

New Course
Cross-Listing
Shared-Resources Course
Deactivate/Activate Course (boldface & underline as appropriate)

Revision of:  Number  Description
            Title  Prerequisites
            Credits

Other (specify):

Department:  Economics  Effective Semester, Year: Spring 2012

Course Number:  Current: Eco 301  New:  Credits: 3

Course Title:  Intermediate Macroeconomics

Course Description to appear in Bulletin:

Theoretical and empirical analysis of aggregate output and employment, the average price level, and interest rates. Applications include long-run growth, business cycles, and fiscal and monetary policy. (No change)

Pre-requisites Statement to be appended to description in Bulletin:

Prerequisite(s): A ECO 110, A ECO 111 with grade of C or better; and A ECO 210 or A MAT 101, 106, 111, 112, or 118.

If S/U is to be designated as the only grading system in the course, check here:

This course is (will be) cross listed with (i.e., CAS ###):

This course is (will be) a shared-resources course with (i.e., CAS ###):

Explanation of proposal:

The course proposal would change the list of prerequisites to include A Mat 101 in accordance with the proposal to change the Bachelor of Arts program to allow A Mat 101 to satisfy the mathematics requirement for the major.

Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:


Course Proposal/Approval

Terrence Kinal  6/10/11

Applied by Chair(s) of Departments (Mathematics or other Department not listed as prerequisite) (Copy of email/approval on following page)  Date  Dean of College

Gregory Stevens/Edelgard Wulfert 10/26/11

Chair ofAuthorization/Delegation

Pinka Chatterji  10/21/11
University at Albany – State University of New York

College of Arts and Sciences  Course and Program Action Form  Proposal No. 11-0/GD

Please check one:  X Course Proposal  [ ] Program Proposal

Please mark all that apply:

New Course  Cross-Listing  Title  Prerequisites
Shared-Resources Course  Credits
Deactivate/Activate Course (boldface & underline as appropriate)  Other (specify):

Department: Economics  Effective Semester, Year: Spring 2012

Course Number  Current: Eco 320  New:

Course Title: Economic Statistics  Credits: 3

Course Description to appear in Bulletin:
Statistical techniques in economic analysis. Topics include distribution theory and statistical inference as applied to regression models. Students gain experience in testing economic theories using a computer regression package. (No change)

Prerequisites statement to be appended to description in Bulletin:
Prerequisite(s): A ECO 110 and 111; A ECO 210 or A MAT 101, 106, 111, 112, or 118.

If S/U is to be designated as the only grading system in the course, check here:

This course is (will be) cross listed with (i.e., CAS ###):

This course is (will be) a shared-resources course with (i.e., CAS ###):

Explanation of proposal:
The course proposal would change the list of prerequisites to include A Mat 101 in accordance with the proposal to change the Bachelor of Arts program to allow A Mat 101 to satisfy the mathematics requirement for the major.

Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:

Chair/Program Department  Date

Terrence Kinal

Approved by Chair (or Department/Program) offering course to be added or prerequisites (Copy of email approval on following page)  Date  Dean/College  Date


Pinka Chatterji  10/21/11