Submitted by: Steven E. Hastings

Department: Applied Economics and Statistics (APEC)

Action: Revise the MATH Requirements of the Food and Agribusiness Management Major

Effective term: 14F

Current degree: BS

Proposed change leads to the degree of: BS

Proposed name: No Change

Revising or Deleting:

Undergraduate major / Concentration: Food and Agribusiness Marketing and Management - BS

Undergraduate minor:

(Example: African Studies, Business Administration, English, Leadership, etc.)

Graduate Program Policy statement change:

(Must attach your Graduate Program Policy Statement)

Graduate Program of Study:

(Example: Animal Science: MS Animal Science: PHD Economics: MA Economics: PHD)

Graduate minor / concentration:

List new courses required for the new or revised curriculum. How do they support the overall program objectives of the major/minor/concentrations)?
(Be aware that approval of the curriculum is dependent upon these courses successfully passing through the Course Challenge list. If there are no new courses enter “None”)

No new courses required.

Supply support letter from the Library, Dean, and/or Department Chair if needed
(all new majors/minors will need a support letter from the appropriate administrator.)

NA

Supply a resolution for all new majors/programs; name changes of colleges, departments,
degrees; transfer of departments from one college to another; creation of new departments; requests for permanent status. See example of resolutions.

NA

Explain, when appropriate, how this new/revised curriculum supports the 10 goals of undergraduate education: http://www.ugs.udel.edu/gened/

Goal # 1 - Attain effective skills in (a) oral and (b) written communication, (c) quantitative reasoning, and (d) the use of information technology is supported by enhancing the math requirements in this major.

Identify other units affected by the proposed changes:
(Attach permission from the affected units. If no other unit is affected, enter “None”)

Approval from the MATH Department is attached.

Describe the rationale for the proposed program change(s):
(Explain your reasons for creating, revising, or deleting the curriculum or program.)

We are revising the MATH requirement from MATH 115 and APEC 240 to MATH 221 or MATH 241 to be consistent with similar agribusiness majors at comparable institutions. Comparable institutions require a calculus course of its majors. We have been using MATH 115 and APEC 240 (applied calculus), but APEC 240 will no longer be offered.

Program Requirements:
(Show the new or revised curriculum as it should appear in the Course Catalog. If this is a revision, be sure to indicate the changes being made to the current curriculum and include a side-by-side comparison of the credit distribution before and after the proposed change.)

See Attached.

Routing and Authorization: (Please do not remove supporting documentation.)

Department Chairperson ___________________________ Date_________________

Dean of College________________________________________ Date____________

Chairperson, College Curriculum Committee________________________ Date________

Chairperson, Senate Com. on UG or GR Studies________________________ Date________

Chairperson, Senate Coordinating Com.________________________ Date________

Secretary, Faculty Senate________________________ Date________

Date of Senate Resolution________________________ Date to be Effective________

Registrar ___________________________ Program Code____ Date________

Vice Provost for Academic Affairs & International Programs__________ Date________

Provost __________________________________________ Date________

Board of Trustee Notification________________________ Date________

Revised 10/23/2007 /khs
DEGREE: BACHELOR OF SCIENCE
MAJOR: FOOD AND AGRIBUSINESS MARKETING AND
MANAGEMENT

MAJOR REQUIREMENTS

Physical Sciences 8
Minimum of eight credits of lab science selected from Chemistry, Physics, Geology, or Physical Science.

Professional Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 115</td>
<td>Pre-Calculus or higher level (MATH 221*, MATH 230, and MATH 241 are strongly recommended)</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 207/ACCT 208</td>
<td>Accounting I and II</td>
<td>6</td>
</tr>
<tr>
<td>COMM 212</td>
<td>Oral Communication in Business</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 312</td>
<td>Written Communications in Business</td>
<td>3</td>
</tr>
<tr>
<td>ECON 151</td>
<td>Introduction to Microeconomics: Prices and Markets</td>
<td>3</td>
</tr>
<tr>
<td>ECON 152</td>
<td>Introduction to Macroeconomics: National Economy</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 301</td>
<td>Introduction to Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Two additional courses offered by the College of Business and Economics at the 300 or 400 level 6
One foreign language course 3-4

A maximum of three credits of Independent Study in Applied Economics and Statistics and a maximum of six credits of Independent Study in all areas, including Applied Economics and Statistics, may be counted toward a degree.

* MATH 221 or higher (with a minimum grade of C+) can be used as a substitute course for MATH 115 and MATH 240.

ELECTIVES
After required courses are completed, sufficient credits must be taken to meet the minimum credits required for the degree. Only four credits of BHAN 120 activity or four credits of performing Music credit may be counted toward the degree.

Suggested Food and Agribusiness Management Electives:
APEC 335 Advanced Data Management
APEC 427 Agribusiness Financial Management
APEC 464 Agribusiness Internship
APEC 471 Futures and Options Markets

Suggested Resource Management Electives:
APEC 406 Agriculture and Natural Resource Policy
APEC 424 Resource Economics
APEC 429 Community Economic Development
APEC 444 Economics of Environmental Management
APEC 480 Geographic Information Systems in Natural Resource Management

Suggested Communications and Writing Electives:
ENGL 301 Expository Writing
ENGL 410 Technical Writing

CREDITS TO TOTAL A MINIMUM OF 124
Hi Steve,

Yes, we certainly approve and are happy to support this. Just FYI - the AP credit requirements are changing. Starting with this admissions cycle, students will need an AP score of 5 to get credit for Math 241. Please let us know if you need anything else.

Best,

John

On 1/15/2014 6:09 PM, Schleiniger, Gilberto wrote:

Begin forwarded message:

From: Diane McMahon <dianemc@math.udel.edu>
Subject: Fwd: Request ASAP
Date: January 15, 2014 at 4:22:00 PM EST
To: Gilberto Schleiniger <schleini@math.udel.edu>

Dr. Schleiniger,

I believe this would be for you (or Rossi).

Diane McMahon
Administrative Assistant II
Mathematical Sciences
University of Delaware
dianemc@udel.edu

--------- Original Message ---------

Subject: Request
Date: Wed, 15 Jan 2014 21:19:07 +0000
From: Hastings, Steven E <hastings@udel.edu>
To: dianemc@math.udel.edu <dianemc@math.udel.edu>
CC: Helsel, Karren Ann <karren@udel.edu>
Diane – Naomi Nash says you can route this request to the appropriate person in the MATH Department. Thanks!

APEC is proposing to change the required math course in our Food and Agribusiness Management and Marketing major from MATH 115 to MATH 221 or MATH 241 beginning in Fall 2014. We have about 50 FABM majors so the additional load to MATH 221 or MATH 241 would be approximately 12 – 13 students each year. Some of our students will receive AP credit for MATH 241 so will not need either course.

Please indicate you approval (or not) for the additional students in MATH 221 or MATH 241, so I can forward our proposal through the Faculty Senate process.

Thanks and Happy New Year!

Steve Hastings

Steven E. Hastings, Ph.D.
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