Wilkes University Curriculum Committee

PROPOSAL SUBMITTAL FORM

Directions:

- Use this set of forms for all proposals sent to the Curriculum Committee.
- Pages 1-3 of this document are required. Any unnecessary forms should be deleted from the packet before submissions. If multiple forms are needed (course addition, course deletion, etc), simply copy and paste additional forms into this packet.
- Note that all new programs (majors and minors), program eliminations, significant program revisions and all general education core revisions must be reviewed and approved by the Provost and Academic Planning Committee (APC) prior to submission to the Curriculum Committee. The Provost will make the decision if a program revision requires APC review.
- Completed and signed forms are due no later than the second Tuesday of every month. Submit one signed original hard copy and a scanned electronic copy with all signatures to the Chair of the Curriculum Committee.

1. Originator: Fanhui Kong
   Department: Mathematics and Computer Science
   Phone: x4837
   Email: fanhui.kong@wilkes.edu

2. Proposal Title: Minor in Actuarial Science

3. Check only one type of proposal: (double click on the appropriate check box and change default value to “checked”).

   X New Program. (Major or Minor Degree Programs). This requires prior review and approval by the Provost and APC.
   □ Elimination of Program. (Major or Minor Degree Programs). This requires prior review and approval by the Provost and APC.
   □ Program Revision. Significant revisions to a program require review and approval by the Provost. The Provost determines if review and approval by APC is necessary.
   □ General Education Revision. Submissions only accepted from the General Education Committee (GEC). Must be reviewed and approved by the Provost.
   □ Creation of new departments, elimination of existing department. This requires prior review and approval by the Provost and APC.
   □ Course additions or deletions not affecting programs (such as elective courses, transition of “topics” courses to permanent courses).
   □ Change in course credit or classroom hours.
   □ Incidental Changes. Includes changes in course/program title, course descriptions, and course prerequisites. (Although these changes do require approval by the Curriculum Committee, they do not go before the full faculty for approval).
   □ Other (Specify)
Indicate the number of course modification forms that apply to this proposal:

- 3 Course Addition Form (plus syllabi)
- Course Deletion Form
- Course Change Form

4. Executive Summary of Proposal.
   Briefly summarize this proposal. The breadth and depth of this executive summary should reflect the complexity and significance of the proposal. Include an overview of the proposal, background and reasoning behind the proposal and a description of how the proposal relates to the mission and strategic long-range plan of the unit and/or university. For incidental changes a one or two sentence explanation is adequate.

Actuarial science is the discipline that applies mathematics and statistical methods to assess risk in the insurance and finance industries. Actuarial science includes a number of interrelating subjects, including probability and statistics, finance, and economics. Actuaries are professionals who are qualified in this field through education and experience. To become an actuary, candidates have to pass the actuarial exams administered by professional organizations. The typical career path begins with a college degree, often in mathematics or business. In recent years, actuarial science has drawn more and more attention. The number of students looking for the actuarial science shows an increasing trend. The proposal for the minor in actuarial science will meet this need.

5. Other specific information. (Not applicable for incidental changes.)

   What other programs, if any, will be affected by this proposal? Describe what resources are available for this proposal. Are they adequate? What would be the effect on the curriculum of all potentially affected programs if this proposal were adopted? Include any potential effects to the curriculum of current programs, departments and courses.

This proposal will affect the Economics department, since EC 102 is a required course.

6. Program Outline. (Not applicable for incidental changes).
   A semester-by-semester program outline as it would appear in the bulletin for a new program or any modified program with all changes clearly indicated.

   A minor in Actuarial Science requires the completion of a minimum of 21 credits, consisting of the following courses:

   Credits:
   EC102 --- 3 credits; MTH111--- 4 credits; MTH 112--- 4 credits; MTH 234--- 3 credits
   MTH 351--- 3 credits; MTH 353---3 credits; MTH 356--- 1 credit
7. Signatures and Recommendations. (please date)
   - Signatures of involved Department chair(s) and Dean(s) indicate agreement with the proposal and that adequate resources (library, faculty, technology) are available to support proposal.
   - If a potential signatory disagrees with a proposal he/she should write “I disagree with this proposal” and a signed statement should be attached to this submission.

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<tr>
<th>Print Name/Title</th>
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<tbody>
<tr>
<td>Barbara Bracken</td>
<td></td>
<td>4/6/2017</td>
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<td>Department chair(s) of all potentially affected programs</td>
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<td>Bill Hudson, Dean</td>
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<td>4/11/2017</td>
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<td>Dean(s) of any potentially affected College/School.</td>
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<tr>
<td>Susan Hrinitzak</td>
<td></td>
<td>4/16/17</td>
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<tr>
<td>Registrar</td>
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<tr>
<td>Anne Skiles</td>
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<td>4/12/17</td>
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<tr>
<td>Provost (For new programs, significant revisions and revisions to the General Education Program revisions only).</td>
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<tr>
<td>Provost should check here ✓ if this proposal is a program revision AND the significance of the revision requires review and approval by APC prior to Curriculum Committee.</td>
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<tr>
<td>Linda Wintik</td>
<td></td>
<td>11/7/17</td>
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<tr>
<td>Chair, Academic Planning Committee. For new programs, program revisions sent via the provost. Signature indicates that the proposal has been reviewed and approved by APC.</td>
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<tr>
<td>Kyle L. Kreider</td>
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<td>4/16/17</td>
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<tr>
<td>Chair, Division of Behavioral and Social Sciences</td>
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Chair, General Education Committee. For revisions to General Education program only.
(Signature indicates that the proposal has been approved by GEC).
1. Course Title: Financial Mathematics

2. Course Number: MTH 234
   Coordinate with Registrar to insure course number is available

3. Course Credit Hours:
   Classroom Hours 3  Lab Hours  Other

4. Course Prerequisites: MTH 100 or the consent of the instructor

5. Course Description (as proposed for the Bulletin):

   This is an introductory course in Financial Mathematics. Students will learn about the different types of interest (simple interest, discount interest, compound interest), annuities, debt retirement methods, investing in stocks and bonds. If time is permissible, more advanced topics will also be covered.

6. Required Documentation: The proposed Syllabus is attached
Wilkes University Curriculum Committee  
COURSE ADDITION FORM – page 1

1. Course Title: Actuarial Mathematics

2. Course Number: MTH 353  
Coordinate with Registrar to insure course number is available

3. Course Credit Hours:  
Classroom Hours 3  
Lab Hours  
Other

4. Course Prerequisites: MTH 351

5. Course Description (as proposed for the Bulletin):  
Actuarial science is the discipline that applies mathematical and statistical methods to assess risk in the insurance and finance industries. Actuarial science includes a number of interrelating subjects, including probability and statistics, finance, and economics. This course will provide basic aspects of the theory of insurance, concentrating on the part of this theory related to life insurance.

6. Required Documentation: The proposed Syllabus is attached
1. Course Title: Actuarial Exam P Preparation

2. Course Number: MTH 356
   *Coordinate with Registrar to insure course number is available*

3. Course Credit Hours:
   Classroom Hours 1  Lab Hours  Other

4. Course Prerequisites: MTH 351

5. Course Description (as proposed for the Bulletin):
   
   This is a seminar course with the aim of helping students prepare for the actuarial exams as needed.