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: Bobak Karimi  
   Environmental Engineering & Earth Science  
   (570) 408-4698 bobak.karimi@wilkes.edu

2. Proposal Title: Environmental Mapping Course Incidental Revisions

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

   □ New Program. (Major or Minor Degree Programs). This requires prior review and approval by the Provost and APC.

   □ New Concentration, Track, or Certificate. The Provost determines if review and approval by APC is necessary.

   □ Elimination of Program. (Major or Minor Degree Programs). This requires prior review and approval by the Provost and APC.

   □ Elimination of Concentration, Track, or Certificate. The Provost determines if review and approval by APC is necessary.

   □ 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)
4. Indicate the number of course modification forms that apply to this proposal:

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

5. 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.

The department of Environmental Engineering & Earth Science (EEES), in continuing to provide career-relevant (industry or academe) courses to its students, has reevaluated the delivered content in EES 271 Environmental Mapping I: GPS and EES 272 Environmental Mapping II: GIS. The proposed changes include retitling EES 271 to be Environmental Mapping I: Introduction to GPS and GIS, and now covering topics that once spanned both 271 and 272. Proposed changes to EES 272 include adding EES 271 as a prerequisite, a new title - Environmental Mapping II: Advanced GIS and Remote Sensing - and new content. The course will be introducing advanced GIS concepts and theories, as well as problems that require skillsets beyond what introductory GIS courses can cover. Additionally, a completely new component in the course will be remote sensing, a rapidly growing field with applications to a wide range of environmental and geoscientific industry and academic disciplines. The EEES department felt that these changes were necessary, not only provide career-relevant courses, but to keep up with current advancements and trends in the geospatial data science community, and ensure that all students graduate from our programs with skills in GPS and GIS.

6. 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.

7. 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.
8. 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.

\begin{tabular}{lll}
Print Name/Title & Signature & Date \\
Department chair(s) of all potentially affected programs & & \\
\end{tabular}

\begin{tabular}{lll}
Print Name/Title & Signature & Date \\
Dean(s) of any potentially affected College/School. & & \\
\end{tabular}

\begin{tabular}{lll}
Print Name & Signature & Date \\
Registrar & & \\
\end{tabular}

\begin{tabular}{lll}
Print Name & Signature & Date \\
Provost (For new programs, significant revisions and revisions to the General Education Program revisions only). & & \\
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. & & \\
\end{tabular}

\begin{tabular}{lll}
Print Name & Signature & Date \\
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. & & \\
\end{tabular}

\begin{tabular}{lll}
Print Name & Signature & Date \\
Chair, General Education Committee. For revisions to General Education program only. (Signature indicates that the proposal has been approved by GEC). & & \\
\end{tabular}
Wilkes University Curriculum Committee
COURSE CHANGE FORM

Directions: Use this form to change information relating to an existing course. Please note, changes to course number require separate course addition/deletion forms (not this form!). Only indicate changes that are proposed (existing and proposed), other fields should be left blank.

Course Number: EES 271
Course Title: Environmental Mapping I: GPS

<table>
<thead>
<tr>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Title</strong></td>
<td>Environmental Mapping I: GPS</td>
</tr>
<tr>
<td><strong>Course Credit</strong></td>
<td>Environmental Mapping I: Introduction to GPS and GIS</td>
</tr>
<tr>
<td><strong>hours. (Indicate classroom, lab or “other” hours.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Course Prerequisites</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Course Description (as proposed for Bulletin)</strong></td>
<td>An introduction to the Global Positioning System (GPS) and environmental mapping concepts and applications. Topics include coordinate systems, reference ellipsoids, geodetic datums, and map projections. Practical field use of GPS is emphasized within the context of understanding system components, satellite signal processing, selective availability, base station differential correction, and data export to a geographical information system. Two hours of lecture and two hours of lab per week.</td>
</tr>
<tr>
<td></td>
<td>An introduction to Global Positioning Systems (GPS), Geographic Information Systems (GIS), and environmental mapping concepts and applications. Topics include coordinate systems, reference ellipsoids, geodetic datums, map projections, history of GIS, relational database management, quality control, GIS as a decision support tool, and data manipulation, processing, and analysis. Practical field use of GPS is emphasized within the context of understanding system components, satellite signal processing, selective availability, base station differential correction, and data export to GIS. Geospatial data science is discussed within the context of real-world locational phenomena. Two hours of lecture and two hours of lab per week.</td>
</tr>
</tbody>
</table>

1 Course descriptions provide an overview of the topics covered. If the course is offered on a scheduled basis, i.e. every other year, or only during a set semester, note this in the description. Course descriptions should be no more than two to three sentences in length.
Wilkes University Curriculum Committee
COURSE CHANGE FORM

Directions: Use this form to change information relating to an existing course. Please note, changes to course number require separate course addition/deletion forms (not this form!). Only indicate changes that are proposed (existing and proposed), other fields should be left blank.

Course Number:  EES 272
Course Title:  Environmental Mapping II: GIS

<table>
<thead>
<tr>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Title</td>
<td>Environmental Mapping II: GIS</td>
</tr>
<tr>
<td>Course Credit hours. (Indicate classroom, lab or “other” hours.</td>
<td></td>
</tr>
<tr>
<td>Course Prerequisites</td>
<td></td>
</tr>
<tr>
<td>Course Description (as proposed for Bulletin)(^1)</td>
<td>An introduction to Geographic Information Systems (GIS). Topics include history of GIS, relational database management, data input and output, quality control, integration with CAD and remote sensing technologies, data analysis, and GIS as a decision support tool. Laboratory component emphasizes practical skills in GIS data management and analysis. Two hours of lecture and three hours of lab per week.</td>
</tr>
</tbody>
</table>

\(^1\) Course descriptions provide an overview of the topics covered. If the course is offered on a scheduled basis, i.e. every other year, or only during a set semester, note this in the description. Course descriptions should be no more than two to three sentences in length.