Instructions: Complete one form per course. Attach this Foundational Studies Course Application Form to the back of the University Curriculum Committee “Request for Curriculum Action” form. Both forms should be submitted to the Foundational Studies Program Office by August 19, 2011.

Part I. Course Information

Course Number and Title: MATH 287: Communication in the Mathematical Sciences

Type of Foundational Studies Course – (Choose One):
[ ] DLS (Disciplinary Lens – Social Science)
[ ] DLL (Disciplinary Lens – Literature and Humanities)
[ ] DLV (Disciplinary Lens – Visual and Performing Arts)
[ ] DLM (Disciplinary Lens – Mathematics)
[ ] DLN (Disciplinary Lens – Natural, Physical, and Applied Sciences)

Includes Lab: [ ] Yes [ ] No

[ ] CID (Communication in the Discipline)
[ ] FF (Finishing Foundations)

Delivery Format(s) – (Check all that apply):
[ ] Face to Face
[ ] Fully Online
[ ] Hybrid
[ ] Concurrent Enrollment
[ ] Other (briefly describe):
Part II. Syllabus Statement

Boise State's Foundational Studies Program provides undergraduates with a broad-based education that spans the entire university experience. MATH 287 satisfies 3 credits of the Foundational Studies Program's Communication in the Discipline requirements. It supports the following University Learning Outcomes, along with a variety of other course-specific goals.

ULO 1. Write effectively in multiple contexts for a variety of audiences
ULO 2. Communicate effectively in speech, both as a speaker and listener

*MATH 287: Communication in the Mathematical Sciences* is designed to help to achieve the goals of the Foundational Studies Program by focusing on the following course learning outcomes.

Part III. Design for Accessibility

In the space below, briefly describe plans for providing access to course materials and activities (or equivalent alternatives) to all students in adherence with the Americans with Disabilities Act. Although these plans may vary from instructor to instructor, the descriptions provided below should be representative of intended departmental and instructor practices. (See example statements appended to this form.)

Part IV. Evidence of Quality Course Design

Please use the table below (column headings for this table should not be changed) to provide evidence that the course has been carefully designed and is clearly aligned with Foundational Studies Program desired ULOs. All sections of the course should share similar student learning outcomes. Teaching and Learning Activities and Assessment Methods may vary from instructor to instructor. Please use the table to report representative strategies that may be used. Assessment activities used for reporting to the Foundational Studies Program should be consistent across different sections of the course.

Please see below.
Boise State University
Foundational Studies Course
Spring 2014

Course Number and Title: MATH 287: Communication in the Mathematical Sciences

**Course Design Table**

<table>
<thead>
<tr>
<th>Foundation ULO 1 &amp; 2 Criteria</th>
<th>Foundation ULO 1 &amp; 2 Notions of Exemplary Work</th>
<th>Course Learning Outcomes: By the end of this course, each student should be able to…</th>
<th>Assessment Method: Evidence of Student Learning</th>
<th>Planned Teaching &amp; Learning Activities / Pedagogy</th>
</tr>
</thead>
<tbody>
<tr>
<td>ULO 1.1: Write effectively: Purpose</td>
<td>Focuses narrowly on a clear purpose</td>
<td>Generate a coherently written mathematical proof which contains appropriate justification for each logically significant step in the proof * Use appropriate sources of mathematical evidence to document the validity of a written mathematical argument; Give a written account of the development of a historical line of mathematical investigation.</td>
<td>Grading of written assignments using mathematical material provided during the course Quality of in class participation in learning activities Moderated peer reviews of in-class work (report: distribution of scores by rubric item)</td>
<td>In class presentations of sample material In class critique sessions in which students will be guided in peer refereeing of written material In class presentations of sample material</td>
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<tr>
<td>ULO 1.2: Write effectively: Voice</td>
<td>Adopts an appropriate voice, tone, &amp; level of formality</td>
<td>* Write an informative abstract of material to be presented in a written document  Write an informative abstract for material to be presented orally at a mock professional talk  Populate poster design with informative narrative material  Design well-written slides for a slide presentation.</td>
<td>Students will hand in a revised, peer critiqued version for each of these four contexts for evaluation. (report: distribution of scores by rubric item)</td>
<td>During the course each student will prepare a mock mathematical paper and present a talk supported by slides  In class activities will support each of these four contexts of writing.</td>
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<tr>
<td>ULO 1.3: Write effectively: Conventions</td>
<td>Uses the text conventions of writing in a field professionally</td>
<td>Write an informative mock popular journal article, explaining a mathematical discovery to a non-disciplinary audience  Write a short survey of a selected mathematical topic to inform a wider disciplinary audience.</td>
<td>Students will hand in revised, peer critiqued, versions of these two documents for evaluation. (report: distribution of scores by rubric item)</td>
<td>Some of the mathematical topics treated in the course will be introduced via exemplary samples of such writing, and will be contrasted with weaker examples.</td>
</tr>
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<tr>
<td>ULO 2.1: Communicate effectively as speaker: Message</td>
<td>Focuses on a compelling central message that is precisely stated, appropriately repeated, memorable, and strongly supported</td>
<td>Present 15-minute conference style talk, explaining mathematical findings in solving a “homework” problem from a list prepared by the instructor.</td>
<td>Observation of the student’s performance of rubric items during the presentation. (report: distribution of scores by rubric item)</td>
<td>Critique of video samples of talks presented by various speakers. Students will have a rubric, and during the viewing of samples there will be appropriate pauses to discuss various points of the presentation, guided by the rubric. Survey of, and illustration of, various appropriate technologies that can be used in support of oral presentations.</td>
</tr>
<tr>
<td>ULO 2.2: Communicate effectively as speaker: Support</td>
<td>Offers a variety of supporting materials that are relevant to the central message, appropriate to the occasion, and in a variety of appropriated media (oral, written, media-supported) and establish the speaker’s credibility and authority</td>
<td>Ask/comment on material presented by a speaker, and request clarification of ideas not understood from the presentation.</td>
<td>In-class activities (report: distribution of scores)</td>
<td>Presentations by the instructor, peers, or video samples.</td>
</tr>
</tbody>
</table>

5-16-2013

Foundational Studies Program Director Signature

Date