Boise State University
Foundational Studies Program Course Application Form
Due to the Foundational Studies Program by August 19, 2011

After the Foundational Studies Program has approved a course, departments will continue through the regular department and college procedures. The approved course should be submitted to the University Curriculum Committee by October 1, 2011.

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Instructions:

1. Complete one form per course.
2. 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: MSE 215: Materials Processing
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
[x] CID (Communication in the Discipline)
[ ] FF (Finishing Foundations)
Delivery Format(s) – (Check all that apply):
[x] 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. MSE 215 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

_MSE 215: Materials Processing_ is designed to integrate course content with the opportunity to develop communication skills important in the field of Materials Science and Engineering and to practice the communication skills used by materials engineers. This course helps to achieve the goals of the Foundational Studies Program by focusing on the following course learning outcomes.

After successful completion of this course, you will be able to:

- Use written and verbal communication to describe how the common processing techniques for a wide variety of materials classes including ceramics, metals, polymers and semiconductor materials
- Able to communicate how processing affects the structure and properties of materials.

**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.)

_MSE 215: Materials Processing_: In the syllabus, the types of course materials and activities will be described. All students will be encouraged to meet or email the instructor privately if they have any issues with any of the course activities or materials and accommodations will be made. For example, laboratory exercises in materials processing will be modified to accommodate a student in a wheelchair. Extra time on tests, oral presentations or other accommodations will be provided to students as needed per the policies of the Disability Resource Center.

**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.
## 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 1.2: Write effectively: Voice</td>
<td>Adopts an appropriate voice, tone, &amp; level of formality</td>
<td>Write effectively in multiple contexts for multiple audiences</td>
<td>Paper on the environmental, societal, economic or global impact of materials processing</td>
<td>Assigned readings with specific attention to voice and formality of the document.</td>
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<tr>
<td>ULO 1.4: Write effectively: Sources</td>
<td>Evaluates and synthesizes ideas from sources well; documents sources according to engineering conventions</td>
<td>Write effectively</td>
<td>Paper on the environmental, societal, economic or global impact of materials processing</td>
<td>Lecture on sources and documentation of sources. Sources required to be turned in separately with feedback.</td>
</tr>
<tr>
<td>ULO 1.5: Write effectively: Revision</td>
<td>Improves across a series of drafts that are a the result of drafting revising and editing in response to feedback</td>
<td>Write effectively</td>
<td>Paper on the environmental, societal, economic or global impact of materials processing</td>
<td>Multiple drafts required including a peer review of first draft as well as significant input from instructors on second draft.</td>
</tr>
<tr>
<td>ULO 1.6: Write effectively: Mechanics</td>
<td>Uses correct syntax, grammar, and punctuation</td>
<td>Write effectively</td>
<td>Paper on the environmental, societal, economic or global impact of materials processing</td>
<td>Multiple drafts required and referral to textbooks</td>
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<td>ULO 1.9: Write in multiple contexts: Research</td>
<td>Uses a wide variety of resources to locate sources</td>
<td>Write effectively</td>
<td>Paper on the environmental, societal, economic or global impact of materials processing</td>
<td>Lecture on sources. Sources are turned in as a separate assignment and reviewed.</td>
</tr>
<tr>
<td>ULO 2.1: Communicate effectively as speaker: Message</td>
<td>Has a compelling message that is precisely stated and strongly supported</td>
<td>Communicate effectively</td>
<td>Oral presentation on the fabrication and manufacturing techniques for a common household item.</td>
<td>Example presentation is given by instructor and rated by students using the same rubric that will be used to grade their presentations.</td>
</tr>
<tr>
<td>Foundation ULO 1 &amp; 2 Criteria</td>
<td>Foundation ULO 1 &amp; 2 Notions of Exemplary Work</td>
<td>Course Learning Outcomes: By the end of this course, each student should be able to…</td>
<td>Assessment Method: Evidence of Student Learning</td>
<td>Planned Teaching &amp; Learning Activities / Pedagogy</td>
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<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 appropriate media (oral, written, media-supported) and establish the speaker’s credibility and authority</td>
<td>Communicate effectively</td>
<td>Oral presentation on the fabrication and manufacturing techniques for a common household item</td>
<td>Specific lecture on sources.</td>
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<td>ULO 2.3: Communicate effectively as speaker: Organization</td>
<td>Uses an organization pattern that is clear and consistently observable and makes content cohesive in creative ways</td>
<td>Communicate effectively</td>
<td>Oral presentation on the fabrication and manufacturing techniques for a common household item</td>
<td>Example presentation is given by instructor and rated using rubric by students</td>
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<td>Other course learning outcomes</td>
<td>Describe the common processing techniques for metals, ceramics, polymers, and electronic materials.</td>
<td>* Homework problems * Exams * Laboratory reports</td>
<td>* Lectures * Videos * Lab exercises * Field trips</td>
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<td>Other course learning outcomes</td>
<td>Relate how processing affects the structure of the materials and its properties</td>
<td>Presentation on processing required for a common household object.</td>
<td>* Lectures * Videos * Lab exercises * Field trips</td>
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<td>Foundational Studies Program Director Signature</td>
<td>Date</td>
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