Assessment Plan

Mission Statement
The Department is dedicated to: 1) providing quality undergraduate and graduate education in geographic, atmospheric, and environmental sciences; 2) undertaking research that contributes to the knowledge of the scientific community; and 3) serving the University and the Public with the expertise and professional abilities of its faculty.

I. B.S. & B.A. in Geography

Program Objectives
The Program objectives of the Geography Department are designed to provide students with the subject matter, skills, and techniques important to the discipline of Geography. The objectives are based upon the standard for Geographic Education as outlined in the National Geography Standards, 1994. These standards were developed on behalf of the American Geographical Society, Association of American Geographers, National Council for Geographic Education and the National Geographic Society.

Subject Matter Objectives
1) An understanding of relationships between people, places, and environments by mapping information about them into a spatial context.
2) Learning that the identities and lives of individuals and peoples are rooted in particular places and in those human constructs called regions.
3) Understanding that physical processes shape the Earth’s surface and interact with plant and animal life to create, sustain, and modify ecosystems.
4) Knowledge that people are central to geography in that human activities help shape the Earth’s surface, and those human settlements and structures are part of the Earth’s surface.
5) Learning that the physical environment is modified by human activities, largely as a consequence of the ways in which human societies value and use the Earth’s resources.
6) Understanding that human activities are also influenced by Earth’s physical features and processes, and that humans compete for control of the Earth’s surface.
7) A geographically informed person knows and understands how to apply geography to interpret the present, past, and plan for the future using a gained understanding of the relationships between people, places, and environments over time.
8) An understanding that Geography describes and explains physical processes and their spatial and temporal distribution on the Earth's surface, including landforms, climate, soils, vegetation and hydrology.
9) Recognizing the distinctiveness of places and regions with respect to the integration of physical and human characteristics; people's perceptions of places and regions; and the use of regional generalization in description and analysis at various scales of inquiry.
10) Enabling students to develop their understanding of physical and human geography through the examination of processes operating within the real world.
Skills Objectives

1) To enable students to develop their understanding of physical and human geography through the examination of processes operating within the real world.
2) To develop students' awareness of geographic connectivity within environmental and social sciences, and to demonstrate geography's contributions to these endeavors.
3) To develop students' skills in the acquisition of information, through lecture, laboratory, and field based enquiry.
4) To further develop students' skills in the handling and analysis of geographical material by a variety of methods including quantitative, qualitative, laboratory and field methods.
5) To further develop students' skills in the presentation of information and analysis of results through written and oral communication.
6) To further enhance students' skills in the handling of information technology.
7) To introduce students to new skills involved in geographical science.
8) To train students in the execution of geographical research projects.

In summary, our program objectives seek to enhance the student’s ability to:

- ask geographic questions
- acquire geographic information
- organize geographic information
- analyze geographic information
- answer geographic questions

Technical Objectives as outlined by NRC, 1997, Rediscovering Geography

1) Observation: field methodology and exploration, remote sensing, and spatial sampling.
2) Analysis and Display: cartography, visualization, spatial statistics, and geographic information systems (GIS).

Assessment Rubric

Table 1: Subject Matter Objectives Assessment

<table>
<thead>
<tr>
<th>Subject Matter Objective</th>
<th>Student standardized performance</th>
<th>Standardized course evaluation</th>
<th>Internship</th>
<th>Honors/ capstone project</th>
<th>Focus groups</th>
<th>Employer survey</th>
<th>Graduate survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. understand relations between people, places &amp; environment via maps</td>
<td>3</td>
<td></td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
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<tr>
<td>2. learn the human value of place and region</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
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<td>8</td>
</tr>
<tr>
<td>3. understand physical processes shaping ecosystems</td>
<td>1</td>
<td>3</td>
<td></td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>4. know that human activity is central to understanding the physical environment</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. learn how human values affect use of the physical environment</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>
6. understand role of physical environment in shaping human activity | 3 | 4 |   |   | 8 |
7. understand how geography is applied in human problem solving | 3 | 4 | 5 | 6 | 7 | 8 |
8. understand spatial and temporal distribution of Earth processes | 1, 2 | 3 | 5 | 6 |   | 8 |
9. realize distinctiveness of places & regions | 2 |   |   |   |   | 8 |
10. understand human & physical geography through observation | 3 | 4 | 5 |   | 7 | 8 |

Table 2: Skills Objectives Assessment

<table>
<thead>
<tr>
<th>Skill Objective</th>
<th>Student standardized performance</th>
<th>Reference standards</th>
<th>Standardized course evaluation</th>
<th>Internship</th>
<th>Honors/capstone project</th>
<th>Focus groups</th>
<th>Employer survey</th>
<th>Graduate survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. observe real-world processes</td>
<td>10</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. connect with social &amp; environmental sciences</td>
<td>10</td>
<td>4</td>
<td></td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. acquire information</td>
<td>10</td>
<td>14</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. analyze geographic data</td>
<td>9</td>
<td>10</td>
<td>14</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td></td>
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<tr>
<td>5. oral &amp; written presentation</td>
<td>9</td>
<td>14</td>
<td>4, 7</td>
<td>5</td>
<td></td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>6. handle information technology</td>
<td>11, 12</td>
<td></td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. introduce new skills in geography</td>
<td>13</td>
<td>14</td>
<td>4, 15</td>
<td>6</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
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<tr>
<td>8. execute geographic research</td>
<td>9</td>
<td>11, 12, 13</td>
<td></td>
<td>5</td>
<td></td>
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Table 3: Technical Objectives Assessment

<table>
<thead>
<tr>
<th>Skill Objective</th>
<th>Student standardized performance</th>
<th>Reference standards</th>
<th>Standardized course evaluation</th>
<th>Internship</th>
<th>Honors/capstone project</th>
<th>Focus groups</th>
<th>Employer survey</th>
<th>Graduate survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. observation</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. analysis &amp; display</td>
<td>11, 12, 13</td>
<td>14</td>
<td>15</td>
<td>5</td>
<td>6</td>
<td>8</td>
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</tbody>
</table>
2. Pre-test/post-test assessment instruments are employed in select upper division courses, overlapping relevant thematic areas of introductory course assessment instruments.

3. Quantitative scores from the department’s standard “Student Evaluation of Instruction” instrument provide a consistent basis for students’ evaluations of knowledge development.

4. Students and internship supervisors are asked to address specific knowledge and skill criteria in their summary reports.

5. Student capstone or honors projects are evaluated on the basis of a “research paper,” writing assessment rubric that evaluates content as well as writing.

6. External advisement panels and alumni focus groups provide feedback on curriculum structure, knowledge and skills needs, and industry employment prospects.

7. Employer and internship supervisor surveys document ability of NIU students, per needs of employment organization.

8. Alumni survey documents perceived value of NIU degree, success in qualifying for degree-related employment, use of degree knowledge & skills in current employment.

9. Semester-capstone research project & standardized grading rubric used in quantitative methods course, which is both required for the major and a prerequisite to electives courses with problem solving focus.

10. Pedagogic standards in several areas of the curriculum stipulate specific textbooks, applications exercises, data sources, instrumentation experience, analytical methods, and even software.

11. Courses in GIS, spatial analysis, and cartography are designed around recommended curriculum or professional standards (e.g., National Center for Geographic Information Analysis Model GIS curriculum, National Map Accuracy standards, American Congress on Surveying and Mapping cartographic production standards).

12. Electives coursework in cartography and GIS/LIS provide students with structured, real-world applications and/or experience on external client projects.

13. Electives courses in physical geography employ reference standards for various field and laboratory research protocol.

14. Quantitative scores from the department’s standard “Student Evaluation of Instruction” instrument provide a consistent basis for students’ evaluations of their own skill development.

15. Students are asked to identify own skill strengths & weaknesses in relation to internship experiences, and any additional skills they acquire through the internship experience.