**Implementing NAU’s Global Learning Outcomes**

**BS Geographic Science and Community Planning**

**FINAL REPORT**

Department of Geography, Planning & Recreation

Northern Arizona University

19 October 2012

**CONTENTS**

I. Introduction 2

II. Mapping GLI Concepts through the GSP Curriculum 3

III. GSP Assessment Plan 9

IV. Going Beyond with Liberal Studies 19

Appendix A - Detailed Curricular Mapping 20

Appendix B - Liberal Studies and GLI Course Sheets 46

**The Global Learning Initiative and the Geographic Science and Community Planning Degree**

***I. INTRODUCTION***

The BS Geography, BS GIS and BS Public Planning Programs in NAU’s Department of Geography, Planning and Recreation were undergoing a curricular redesign and consolidation during the Summer and Fall of 2010 through the Spring of 2011. The new major of Geographic Science and Community Planning (GSP) was seen as a stepped curricular experience that would better prepare students for careers in a globalizing and increasingly technical world. When faculty members investigated the call for the Global Learning Initiative (GLI) at Northern Arizona University, they felt the goals of the department and the goals of GLI created a synergy in student education and preparedness. It was felt that the department already had accomplished much of what Global Learning was about, but did not adequately understand the details of where exactly it was within the curriculum (and how addressed) and that did not make it as overt as possible. With interest from the faculty of Geography, Geographic Information Systems and Community Planning, Dr. Alan Lew and Dr. Dawn Hawley submitted a grant to for GLI funding in Fall 2010. The grant was funded beginning in Spring 2011.

**Identification of Learning Outcomes and Concepts**

Initially, a meeting with GLI consultants was held in the department Spring 2011 as a kick-off event. Several faculty members attended subsequent workshops on GLI concepts and processes through the Spring and into the Summer. During Spring 2011, the department’s program redesign of Geosphic Science and Community Planning was passed by the University Curriculum Committee, allowing the faculty to move into GLI learning outcome statements and specific concepts. This was possible to do relatively quickly as the curriculum redesign process familiarized the faculty at a detailed level with all of the degree’s courses through intensive curricular mapping.

Overall, we felt that making one basic statement on each of the three aspects of GLI was insufficient as a starting point. The faculty met during the Summer 2011 and identified GLI-related concepts that were believed integral to our program and its two major specialty areas. This provided a list under each of the three GLI goals from which to brainstorm. From these were crafted concepts, program statements, and a broad learning outcome for each specialty area. These program statements or learning outcomes are also adopted in the BS degree’s Program Mission Statement.

Goals, Learning Outcome Statements and Concepts:

1. Global Awareness and Engagement

GSP Students will gain awareness of the earth and develop confidence to engage with places, whether in their own communities or across the globe. Through an understanding of geographic scale, students will consider interrelationships between our physical and human environments to explain local and global issues. Likewise, they will uncover how local and global influences create contemporary places and landscapes through environmental, social, and cultural processes. They will apply emerging technologies that engage them locally while thinking globally, better preparing them for a globalizing world.

Critical concepts (7):

* Location, Context and Cultures: Place and Geographic Context
* Contemporary Global Issues
* Global-Local Nexus
* Economic, Cultural and Political Globalization
* Climate Change, Land Resource Use/Exploitation
* Scale Perspectives
* Political System and World Systems

2. Sustainable Environments and Communities

GSP Students will communicate and apply approaches for maintaining sustainable environments, communities, and landscapes for the benefit of future generations. To do so, they will learn the fundamental interrelationships between the earth’s physical and human systems. Physical systems include interactions of climate, water, landforms, and habitats, all modified by human use and exploitation. In turn, human systems include cultural, social and economic processes that shape community development, design, and sense of place. Students will ultimately develop a variety of geographic and community-based skills that support local, regional and global sustainability.

Critical concepts (9):

* Interrelationships
* Scale Perspectives
* Physical Environments and Community
* Sense of Place and Place attachment
* Geographic Context
* Cultural Value Systems
* Perceptions of Change
* Environmental System (Climate, biogeography, geomorphology, hydrology)
* Sustainable Development and Community Design.
1. Our Diverse World

GSP Students will develop an understanding and appreciation of the diversity of the planet in terms of its physical and human geography. They will learn how our natural and cultural landscapes have evolved through time and space, scales, and contexts. They will develop self-awareness of their own situation and awareness and empathy for other peoples, cultures, communities and environments, and an openness to the earth’s great geographic differences. They will learn skills of spatial thought and analysis that enhance their ability to work with and appreciate diversity, while maintaining the objectivity needed to succeed in their chosen careers.

Critical concepts (6):

* Scale Perspectives: Local, Regional and Global
* Environmental Variation and Human Differences
* Historic Evolution and Context of Places
* Awareness and Empathy for Other Peoples, Cultures, and Environments
* Interaction with and Openness to Differences
* Interactions, Interrelationships and Implications of Physical Environments and Human Variations

By identifying and agreeing on a statement of expected learning outcomes and the critical concepts under each GLI goal, the GSP faculty were ready to see where in the current curriculum these items were addressed or needed additional fine tuning to meet the program objectives.

***II. MAPPING GLI CONCEPTS THROUGH THE GSP CURRICULUM***

Mapping the concepts important to the learning outcomes was a critical step for the new program, especially as a new assessment plan would also need to be created reflecting the new program. As done through the program and course redesign process, detailed curricular mapping allowed the faculty to identify where GLI concepts were taught, both in core and emphases courses. This also allowed the faculty to identify multiple criteria including where each concept was taught, at what level, the assessment tools or methods used, and core topics covered. Mapping also provided information on possible content gaps within the curriculum. Faculty members were asked to indicate the following for each class they taught or assumed responsibility for (e.g., when overseeing courses taught by part –time faculty):

* Level at which concept is taught – Beginning (B), Intermediate (I), or Advanced (A)
* How the concept is addressed in the curriculum
* Assessment tools that are used
* Core topics that are covered (optional)

This mapping was completed through an online form sent from one faculty member to the next. This was critical as Dr. Tom Paradis was in Italy for the Fall semester and the faculty wanted full involvement. An example of the mapping of one concept under the Diversity goal is below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Our Diverse World (mapping example)* |  |  |  |  |
| Concept:  |  |  |  |  |
|  Interactions, Interrelations and Implications of Physical Environments and Human Variations |  |  |  |  |
|

|  |  |  |  |
| --- | --- | --- | --- |
|  Level Taught (B, I, A) |  How Addressed | Assessment Tools | Topics (if you want) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| GSP130 | B | hands on mapping exercises | labs |  |
| GSP148 | B | lectures, readings | quiz | physical environment and food provision |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based excercises | interactions among realms of physical geography (i.e. atmosphere, hydrosphere, lithosphere, biosphere) extensively covered |
| GSP201 |  |  |  |  |
| GSP206 |  |  |  |  |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | human & physical geography of Europe and all of the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | human & physical geography of Africa, Asia and the Pacific realm |
| GSP259 | I | lectures, readings, discussions | tests, labs, Google Earth-based excercises | relations between landforms and physical controls (e.g. climate, hydrology, geology, humans) extensively covered |
| GSP276 | B | readings, videos, activities | quiz, written assignment | sustainable tourism perspectives on place |
| GSP303 | I | L.A. field trip, Flagstaff redesign project | field trip presentation, Flagstaff redesign presentation | consideration and research of local/regional physical/environmental characteristics as applied to diverse places (Los Angeles), and local redesign efforts.  |
| GSP320 |  |  |  |  |
| GSP331 | I | Lectures, data analysis | labs, projects |  |
| GSP365 |  |  |  |  |
| GSP371 |  |  |  |  |
| GSP375W | I | readings, research project | reading assignments, research paper and presentation |  |
| GSP376 |  |  |  |  |
| GSP401 | A | readings, projects | projects | resource calculations, flooodplains, dark sky |
| GSP402 |  |  |  |  |
| GSP405C | A | project, research discussion | projects | planning with physical constraints, floodplain, resource calculations |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C | A | capstone research project | research paper and presentation | Students are required to include a substantial component of physical interactions and implications in their capstone research project.  |

 |  |  |  |  |
|  |  |  |  |  |
| ( See Appendix A for complete curricular mapping results) |  |  |  |  |
|  |  |  |  |  |

**Mapping Results**

The results of the GLI curricular mapping demonstrated a multi level or tiered progression of the department’s GLI concepts. Degree core courses were critically assessed in the mapping as all GSP majors needed to participate in these.

The results of the mapping were very positive. All 22 critical concepts were addressed in core courses. All but two of the concepts were threaded through courses using all three levels of engagement, (B)eginning, (I)ntermediate and (A)dvanced. In only two instances were critical concepts taught at the (B) and (I) levels only. This was under Global Awareness and Engagement - (1) Climate, Land Change and Resource Use and Exploitation and (2) Political Systems and World Systems. Although these did not appear as advanced (A) concepts in the core, they are taught at advanced levels within emphasis classes. There is also overlap between the Political Systems and World Systems concept and the Economic, Cultural and Political Globalization concepts, which addressed the advanced issues in the former.

The assessment tools used in courses varied, ranging from exams and quizzes to papers, projects, presentations and field trips. The projects, presentations and papers also incorporated technologies such as GIS, computer gaming, and Google Earth. All of these approaches focus on experiential learning and authentic assessments. Courses were then identified that were both strong in the core as well as in particular GLI criteria. These would become important later in the assessment strategy.

The results of the detailed curricular mapping were compiled and presented to the faculty during the Spring 2012 semester. These provided the faculty with information on GLI-related concepts from a more holistic view of what the students would be exposed to during their education at NAU in this program and its emphases. The faculty then began to consider which of the 22 specific concepts to assess.

***III. GSP ASSESSMENT PLAN***

**Assessment Process**

The sections below contain the assessment plan adopted for the BS Geographic Science and Community Planning (GSP) program. Because the GSP program was new, an overhaul of the assessment strategy was in order. The assessment strategy now includes the professional learning outcomes from the former Geography, GIS and Planning BS programs, as well as GLI. The detailed mapping provided a guideline for how the GLI concepts were currently being taught and assessed in the classroom. During Spring 2012, an initial assessment plan was formulated by Dr. Tom Paradis for the new GSP major, working both the new program’s learning outcomes and the GLI learning outcomes into the new assessment strategy.

The mission statement for the Geography, Planning and Recreation Department (GPR) became one of the starting points.

GPR Mission Statement

The mission for the Department of Geography, Planning & Recreation:

1. Provide effective and challenging courses in geography and public planning for majors and the university liberal studies curriculum;

2. Produce well qualified graduates who are prepared to make significant contributions as professional geographers, educators, and planners;

3. Provide effective outreach and assistance to the people of Arizona and beyond in rural geography, geographic education, remote sensing, geographic information systems, spatial analysis, public planning, and rural resources management;

4. Provide effective outreach and service to rural communities throughout the region, including the Native American nations;

5. Engage in and publish (in appropriate media) the results of geographic/planning research with special emphasis on cultural and physical geography, rural and applied geography, community planning and resource management, and

6. Support and enhance the mission of the College of Social and Behavioral Sciences, in cooperation with the Parks and Recreation Program and other allied programs across the Northern Arizona University campus, to prepare students to effectively assume their future roles as professional geographers, planners, educators, and managers of natural resources.

As assessment was discussed, the work on GLI goals and statements written and adopted Summer 2011 became another critical starting point for assessment in addition to what was needed for the new program. From these broad statements under the goals, more focused learning outcomes were developed. GLI and the new program assessment were integrated.

GSP Program Goals and the GLI Goals and Statements

The BS Geographic Science and Community Planning (GSP) program formally adopted the following Program Goals. These goals aligned directly with the university’s Global Learning Initiative and are listed on the degree’s homepage at: <http://nau.edu/SBS/GPR/Degrees-Programs/BS-Geographic-Science-Community-Planning/> . The BS GSP Program Goals are:

1. Global Awareness and Engagement

GSP Students will gain awareness of the earth and develop confidence to engage with places, whether in their own communities or across the globe. Through an understanding of geographic scale, students will consider interrelationships between our physical and human environments to explain local and global issues. Likewise, they will uncover how local and global influences create contemporary places and landscapes through environmental, social, and cultural processes. They will apply emerging technologies that engage them locally while thinking globally, better preparing them for a globalizing world.

2. Sustainable Environments and Communities

GSP Students will communicate and apply approaches for maintaining sustainable environments, communities, and landscapes for the benefit of future generations. To do so, they will learn the fundamental interrelationships between the earth’s physical and human systems. Physical systems include interactions of climate, water, landforms, and habitats, all modified by human use and exploitation. In turn, human systems include cultural, social and economic processes that shape community development, design, and sense of place. Students will ultimately develop a variety of geographic and community-based skills that support local, regional and global sustainability.

1. Our Diverse World

GSP Students will develop an understanding and appreciation of the diversity of the planet in terms of its physical and human geography. They will learn how our natural and cultural landscapes have evolved through time and space, scales, and contexts. They will develop self-awareness of their own situation and awareness and empathy for other peoples, cultures, communities and environments, and an openness to the earth’s great geographic differences. They will learn skills of spatial thought and analysis that enhance their ability to work with and appreciate diversity, while maintaining the objectivity needed to succeed in their chosen careers.

**GSP (Geographic Science and Community Planning) Learning Outcomes**

The eight learning outcomes below represent an alignment with the five fundamental educational goals for the GSP program (4-8 below), written and approved by the entire GSP faculty in Spring 2011 and the three GLI goals. The goals were developed through curriculum redesign that occurred first in the Vice Provost for Academic Affair’s Student Learning and Curriculum Design (SLCD) initiative during 2009-2010, and more recently in the Global Learning Initiative (GLI) in 2011-2012. The outcomes reflect our program’s commitment to all three GLI goals, adopted here for our own educational imperatives. Finally, all outcomes provide a holistic interpretation of the knowledge and skills required for an education in the realm of Geodesign, which is an innovative approach to blending student abilities in geospatial sciences, urban design, and GIS techniques.

1. **Global Awareness and Engagement**

GSP Graduates will be able to articulate how external or global processes influence and interact with local places and development decisions.

1. **Sustainable Environments and Communities**

GSP Graduates will be able to evaluate and design more sustainable and livable places while considering the interrelationships between physical and human environments.

1. **Our Diverse World**

GSP Graduates will be able to objectively appraise different perspectives and approaches originating from diverse places and physical environments.

1. **Written Communication**

GSP graduates will be able to professionally communicate synthesized knowledge, research, and designs through written products appropriate for diverse audiences and perspectives.

1. **Oral Communication**

GSP graduates will be able to professionally communicate synthesized knowledge, research, and designs through oral presentations for diverse audiences.

1. **Geospatial Techniques**

GSP graduates will be able to interpret, design, and produce quality 2D and 3D computer-generated maps and illustrations that communicate spatial knowledge at local, regional, and global scales.

1. **Planning and Participation**

GSP graduates will be able to work effectively in teams to design more sustainable places through the synthesis and input of various disciplinary and community perspectives.

1. **Research and Analysis**

GSP graduates will be able to apply relevant qualitative and quantitative research methods to conduct scientific, objective inquiries at local, regional, and global scales.

Student Learning Outcomes Relation to the Unit Mission and Goals

The first three outcomes above directly align with the three overarching goals of the BS in Geographic Science and Community Planning (GSP). These were designed and adopted through the Global Learning Initiative’s curriculum redesign process.

Further, the language and intent of the last five outcomes are focused on academic skills that need to be demonstrated by our students in the professional realm. For instance, student communication, research, design, and planning products are expected to demonstrate competence with incorporating aspects of diversity, sustainability, and global perspectives. The eight learning outcomes therefore point directly or indirectly to all three educational goals.

Assessment Process Design and Manageability

Again, the curricular mapping exercise provided a solid base from which to begin to ensure the linked nature of the educational process and eventual assessment. Faculty were involved based on courses, projects, and coursework that created synergies with both GSP learning outcomes and those of GLI. An assessment matrix was created using the eight learning outcomes in the department versus classes required in the degree core. Below is an example of some of this mapping. From this, we located courses and projects, exams, presentations and other work from which to build an assessment strategy.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Example of Assessment Matrix Mapping |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Program Learning Outcomes** |  | **GSP371** | **GSP331 - lab exercises relating to global diversity** | **GSP 375W Final Essay Exam (Prompt about theories of global and sustainable development)** | **GSP 375W Research Report** | **GSP401** | **GSP405C** | **GSP 480C Research Paper** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Global Awareness and Engagement\* |  | X | x | x |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sustainable Environments and Communities\* | x |  | x |  |  | x |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Our Diverse World\* |  |  |  | x | x |  | x |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oral Communication |  |  |  |  |  |  |  | x |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Written Communication |  |  | x |  |  | x | x | x | x |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Geospatial Techniques |  |  |  | x |  |  |  | x | x |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Planning and Participation |  |  |  |  |  |  |  | x |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Research and Analysis |  |  | x |  |  | x | x | x | x |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

 |  |  |  |  |  |
|  |  |  |  |  |  |

Students were also involved in the creating the assessment plan, though indirectly. During Spring 2012 a pilot version of the Student Survey was tested, yielding 21 responses from current geography and planning majors. A follow-up focus group session was conducted with members of the Geodesign Student Group, our official NAU student organization for geography and planning-oriented students. Though not providing direct input on the assessment plan, the students voiced their views regarding the learning outcomes and their own education through the survey and focus group. This information will lead to further input and student involvement in the assessment process in future semesters.

External sources consulted in the process included:

* + - * Assistance from the Office of Academic Assessment and the *Student Learning and Curriculum Design (SLCD)* initiative. This plan is the final component of that redesign process
			* Participation in the NAU *Global Learning Initiative (GLI),* which expects student experiences and assessments centered on global education, sustainability, and diversity
			* Informal Alumni communications
			* Essential elements of geographical knowledge adapted from the *National Geography Standards, 1994*
			* Bloom’s Taxonomy
			* Assessment plan from California State University
			* Rubric templates to construct geography-specific rubrics, from NAU’s OAA

Based on current and past practices, we believe this assessment plan is manageable and sustainable given current resources and personnel. All GSP faculty have been involved in various aspects of the plan’s development, and will be variously involved in the collection and analysis of assessment data. Further, we have tested the rubric system in GSP 480C, 303, and 375W for several years with excellent results. Several faculty are collaborating on the standardization of some, if not all, rubric criteria across courses. All eight learning outcomes can be assessed every year using these and related tools, though the primary assessment analysis and report will occur during Phase 2 of the 3-year Assessment Cycle. We are therefore optimistic.

**Using Assessment Findings**

* Some assessment findings, such as written and oral communication rubrics from the senior capstone and JLW courses, will be available each year for GSP faculty to discuss during bi-weekly GSP faculty meetings and the bi-annual faculty retreats at the beginning of Fall and Spring semesters. While student workers and/or a graduate student may assist with analyses as necessary, the Department Chair will be responsible for adding the assessment reports to faculty meeting agendas and for distributing assessment results to the faculty.
* Every year the faculty will consider whether minimal and realistic changes are necessary to improve specific pedagogies of courses or lessons. Every three years, in conjunction with Phase 3 of the Assessment Reporting Process, a more comprehensive review of assessment findings will be conducted to determine any major changes that might involve the UCC. The faculty will determine which particular outcomes are being met well, and which ones could use additional attention within the curriculum, thereby encouraging the most significant changes to focus on the needs of particular outcomes.

**Implementation of Assessment Plan Components**

In this section we provide an alternative format to the standard assessment matrix typically associated with NAU assessment plans. We still provide the same information, though more efficiently through the following spreadsheet and succeeding bulleted items. The faculty were consulted in the selection of courses, projects and materials that are to be the bases of assessments for the learning outcomes.

* + The **table below** indicates the first three components of the standard assessment matrix, including (1) Learning outcomes, (2) Where the outcomes is assessed, and (3) Evidence/Indicators of learning used for assessment.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Program Learning Outcomes** | GSP 130 - Pre-post test on mapping techniques | GSP 130 - Global Mapping Lab: Unusual Landscapes | GSP 150 Written Exam Questions (two total) | GSP 150 Field Research Lab and Report | GSP 206 - Community Images Survey Project | GSP 303 Neighborhood Design Presentation and Report | GSP331 - Final Mapping and GIS Techniques Exam | GSP 371 - Caesar City-Building Project and Report | GSP 375W Scientific Research Project and Paper | GSP 405 C - Professional Site Plan Design Presentation | GSP 405C - Site Design Staff Report | GSP 480C Original Scientific Research Paper | GSP 480C Professional Research Conference Presentation | GSP Student Survey Questionnaire | Student Focus Group as Questionnaire follow-up | Internship Agency Supervisor Reviews |
| Global Awareness and Engagement |  | **x** |  |  |  |  | **x** | **x** | **x** |  |  | **x** |  | **x** | **x** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sustainable Environments and Communities |  |  | **x** |  |  | **x** |  | **x** |  | **x** | **x** |  |  | **x** | **x** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Our Diverse World |  | **x** | **x** |  |  | **x** | **x** | **x** | **x** |  |  | **x** |  | **x** | **x** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oral Communication |  |  |  |  |  | **x** |  |  |  | **x** |  |  | **x** | **x** | **x** | **x** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Written Communication |  |  |  |  | **x** | **x** |  | **x** | **x** |  | **x** | **x** |  | **x** | **x** | **x** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Geospatial Techniques | **x** | **x** |  | **x** |  | **x** | **x** |  |  | **x** | **x** | **x** |  | **x** | **x** | **x** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Planning and Participation |  |  |  |  | **x** | **x** |  |  |  | **x** | **x** |  |  | **x** | **x** | **x** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Research and Analysis |  |  |  | **x** | **x** |  |  | **x** | **x** |  |  | **x** | **x** | **x** | **x** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intro-level Assessments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Upper-level Assessments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Indirect Assessments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Collection Methods**

All faculty members who are responsible for the assessment projects listed above have agreed to collect and record annual data through some form of criteria sheet or rubric for those specific assignments. While doubling as course-based assessments, data from these assignments will be used to inform the program-level assessment process. When requested for the 3-year Assessment Cycle reporting process (probably Phase 2, if not others), participating faculty members will provide this annual data to the Department Chair, who in turn will compile the raw data and determine the level of further analysis and reporting necessary.

**Analysis Methods**

The following approaches will be used to analyze the assessment data:

* + **Direct Evidence:** All direct evidence in the table above will be collected through some form of criteria sheet or rubric by participating faculty members. Some rubrics, including those associated with GSP 303, 375W, 405C and 480C include some or all standardized criteria between classes. A student worker or graduate student may be employed to assist with aggregation and graphics as necessary, as directed by the Department Chair.
	+ **Indirect Evidence:** An aggregated report that includes the **Student Questionnaire** data and follow-up **Student Focus Group** data will be provided by the Chair (with assistance from student workers or Graduate Assistants, as necessary). This process was piloted during Spring 2012. The professor maintaining the **internship supervisor reviews** will provide an aggregate report of reviews as they pertain to the appropriate program learning outcomes.
	+ **Inter-rater Reliability:** To better strengthen and verify the assessment materials submitted by individual faculty members, the following approaches will be used:
		- **Capstone oral presentations:** One or more faculty members in addition to the course instructors will attend and complete rubric evaluations for capstone student presentations that take place at the bi-annual Student Seminar Research Conference or at City Hall (for the planning students).
		- **Internship Supervisor Reviews:** All students in the Community Planning emphasis are required to complete an internship. Supervisors representing the internship agency provide a final review of student competence and accomplishments. These outside reviewers will improve the reliability of internal direct assessment data from individual faculty members.
		- **Written and cartographic (GIS) assessment products:** During Phase 2 of the Assessment reporting process, a team of faculty members will be provided with sample student products that represent grades of A, B, C, and, if necessary, D/F-level. The team of two or three faculty members will convene to review these samples and verify the instructor’s own ratings. *This process is not intended to critique the instructor, but to provide an opportunity for inter-rater reliability to strengthen the assessment analysis.*

**Feedback Procedure**

The final, aggregated assessment report will be provided to all GSP faculty members by electronic means and as hard copies at a regularly scheduled GSP faculty meeting. The meeting will be devoted to discussing the overall results and comparing the overall strength and weaknesses of students with respect to the eight learning outcomes. Following this discussion, the faculty will determine how to prepare for Phase 3 of the Assessment Reporting Cycle, devoted to uses of the assessment findings. This and following meetings will focus on what internal course changes and larger UCC changes (if necessary) should be implemented to make any necessary improvements within the curriculum.

***IV. GOING BEYOND WITH LIBERAL STUDIES***

Although the BS Geographic Science and Community Planning program covers the GLI goals very well, and at multiple levels, the faculty went further, intending to additionally enhance the education of undergraduates by the use of directed liberal studies. Although not required, the GPR department in the past has provided listings of preferred liberal studies courses on its advising sheets that students in various specialties could use to enhance their educational experience depending on student and professional interests. The faculty recreated these listings to include courses that were felt to have GLI significance, in addition to specialty or emphasis area related courses. These course lists are for the general GSP degree as well as the specializations in Community Planning and Development and Geospatial Technologies, and can be found in Appendix B.

**APPENDIX A**

**DETAILED CURRICULAR MAPPING**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|

|  |  |  |  |
| --- | --- | --- | --- |
| ***Global Awareness and Engagement*** |  |  |  |
| Concepts |  |  |  |  |
| 1 Location, Context and Cultures; Place and Geographic Context2 Contemporary Global Issues3 Global-Local Nexus4 Economic, Cultural and Political Globalization5 Climate Change, Land and Resource Use/Exploitation6 Scale Perspectives 7 Political System and World Systems |  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |  |  |  |
| Concept | Beginning/Intermediate/Advanced |  |  |  |
| 1 Location, Context and Cultures; Place and Geographic Context | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 | I | lectures, papers, websites, discussions | quiz, papers, disc/responses | Foodways , people and place |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based exercises | geographic location and zones (e.g. climatic, geomorphic,  |
| GSP201 | B | reading, lecture, image assignment | exam, written assignment | Neighborhood imagery (what is good) |
| GSP206 |  |  |  |  |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 |  |  |  |  |
| GSP241 |  |  |  |  |
| GSP259 | I | lectures, readings, discussions | tests, labs, Google Earth-based exercises | geomorphic zones |
| GSP276 |  |  |  |  |
| GSP303 |  |  |  |  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | I,A | lectures, readings, discussions, project | exams, project | city system evolution, cultural areas, city forms and global economics |
| GSP375W |  |  |  |  |
| GSP376 |  |  |  |  |
| GSP401 |  |  |  |  |
| GSP402 |  |  |  |  |
| GSP405C |  |  |  |  |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C |  |  |  |  |

 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| 2 Contemporary Global Issues | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 | B | sustainability lecture | discussion | Ag and tech shifts |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based exercises | climate change, biodiversity, soil degradation, natural hazards, natural resource extraction, water quality |
| GSP201 | B | lectures | exams | sustainability, Ag and urban forms, regulation |
| GSP206 |  |  |  |  |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 |  |  |  |  |
| GSP241 |  |  |  |  |
| GSP259 | I | lectures, readings, discussions | tests, labs, Google Earth-based exercises | soil degradation |
| GSP276 |  |  |  |  |
| GSP303 | B | lecture, readings | exams, design projects informed by international cases | air pollution, transportation, suburban sprawl, energy use.  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | A | discussions, readings, written assignment | exams, discussions, written assignment | global economics |
| GSP375W | I | lectures, readings, discussion, research project | written weekly reading assignments; research project informed by international case studies and examples.  | readings and discussions about global development concepts and cases |
| GSP376 |  |  |  |  |
| GSP401 |  |  |  |  |
| GSP402 |  |  |  |  |
| GSP405C |  |  |  |  |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 Global-Local Nexus | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 | B | lectures, reading | quiz, discussions | immigration impact on local |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based exercises | physical process interactions among spatial scales (local, regional, continental, global) |
| GSP201 |  |  |  |  |
| GSP206 |  |  |  |  |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 |  |  |  |  |
| GSP241 |  |  |  |  |
| GSP259 | I | lectures, readings, discussions | tests, labs, Google Earth-based exercises | geomorphic process interactions among spatial scales (local, regional, continental, global) |
| GSP276 |  |  |  |  |
| GSP303 |  |  |  |  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | A | discussion, written assignment, readings | exams, written assignment, project |  |
| GSP375W | I | lecture, readings, research project including global-local interaction | written research report, certain reading assignments | Will actually teach concept of global-local nexus |
| GSP376 |  |  |  |  |
| GSP401 |  |  |  |  |
| GSP402 |  |  |  |  |
| GSP405C |  |  |  |  |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C | I | Individual or team research projects | written research report, oral presentation | topics vary based on chosen research project.  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 5 Climate Change, Land and Resource Use/Exploitation | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 | B | lectures, web sites | discussion, quiz | Agricultural land use, 100 mile diet, “locavores” |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based exercises | concept extensively covered |
| GSP201 | B | lectures, readings, websites | sustainable agriculture, urban ag |  |
| GSP206 |  |  |  |  |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 |  |  |  |  |
| GSP241 |  |  |  |  |
| GSP259 | I | lectures, readings, discussions | tests, labs, Google Earth-based exercises | climatic geomorphology, anthropogenic movement of earth materials |
| GSP276 |  |  |  |  |
| GSP303 |  |  |  |  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | I | lectures, readings, discussions | exams | hinterlands and city growth, exploitation, colonialism, Overton's Theory |
| GSP375W | B | lectures, readings, discussions | essay exams, reading assignments | unsustainable and/or inequitable land-use practices and resource distribution in developing nations.  |
| GSP376 |  |  |  |  |
| GSP401 |  |  |  |  |
| GSP402 |  |  |  |  |
| GSP405C |  |  |  |  |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 Scale Perspectives  | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 | I | discussions, lecture | quiz, discussion | neolocalism, regionalism, nationalism, global cuisine/fusion |
| GSP150 |  |  |  |  |
| GSP201 | B | lecture |  discussion | planning scales, issues |
| GSP206 |  |  |  |  |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 |  |  |  |  |
| GSP241 |  |  |  |  |
| GSP259 |  |  |  |  |
| GSP276 |  |  |  |  |
| GSP303 |  |  |  |  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | A | discussions, lecture, project | exams, project | economic and urban systems, urban issues |
| GSP375W | I | research project | research report, staff report | Influence of different scales on local issues. |
| GSP376 |  |  |  |  |
| GSP401 | A |  projects, lecture | projects, exam | regional plans, general plans, ARS |
| GSP402 |  |  |  |  |
| GSP405C | A | project, discussion | project | community/city scale, plans, needs |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 | I | readings, projects | geographic scales and issues in urban GIS |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 7 Political System and World Systems | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 |  |  |  |  |
| GSP150 |  |  |  |  |
| GSP201 | B | lecture, reading, discussion | worksheet, discussion | ARS, legal requirements, political natures |
| GSP206 |  |  |  |  |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 |  |  |  |  |
| GSP241 |  |  |  |  |
| GSP259 |  |  |  |  |
| GSP276 |  |  |  |  |
| GSP303 |  |  |  |  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | I | lecture, readings, project, worksheet | exams, project | trade and economics, global tech and urbanization |
| GSP375W | B | lecture, readings | essay exams, reading assignments | Global political-economic systems; supranationalism, devolution, world systems theory; core-periphery-semiperiphery and 3rd-world/developing world labels and models.  |
| GSP376 |  |  |  |  |
| GSP401 |  |  |  |  |
| GSP402 |  |  |  |  |
| GSP405C |  |  |  |  |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| ***Sustainable Environments and Communities*** |  |  |
| Concepts |  |  |  |
| 1 Interrelationships2 Scale Perspectives3 Physical Environment and Community4 Sense of Place + Place Attachment5 Geographic Context6 Cultural Value Systems7 Perceptions of Change8 Environmental System (climate, biogeography, hydrology, geomorphology)9 Sustainable Development and Community Design |  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  | Level Taught (B,I,A) | How Addressed | Assessment Tools |
|  |  |  |  |
| Concept |  |  |  |
| 1 Interrelationships | Level Taught (B,I,A) | How Addressed | Assessment Tools |
| GSP130 | B | lectures, readings, discussions | lab, project |
| GSP148 |  |  |  |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based exercises |
| GSP201 |  |  |  |
| GSP206 |  |  |  |
| GSP220 | B | readings, videos, activities | quiz, written assignment |
| GSP239 |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment |
| GSP241 | B | readings, videos, activities | quiz, written assignment |
| GSP259 | I | lectures, readings, discussions | tests, labs, Google Earth-based exercises |
| GSP276 | B | readings, videos, activities | quiz, written assignment |
| GSP303 | I | lectures, readings, discussions | exams, reading assignments |
| GSP320 |  |  |  |
| GSP331 | I | Demos, lectures | lab assignments |
| GSP365 |  |  |  |
| GSP371 |  |  |  |
| GSP375W | B | readings, research projects | reading assignments, research report |
| GSP376 | I | readings, videos, activities | quiz, written assignment |
| GSP401 |  |  |  |
| GSP402 |  |  |  |
| GSP405C |  |  |  |
| GSP406 |  |  |  |
| GSP408 |  |  |  |
| GSP421 | A | readings, videos, activities | quiz, written assignment |
| GSP423 |  |  |  |
| GSP432 |  |  |  |
| GSP433 |  |  |  |
| GSP435 |  |  |  |
| GSP436 |  |  |  |
| GSP437 | A | lectures, readings, discussions | labs, projects  |
| GSP438 |  |  |  |
| GSP480C | I | research project | research report, oral presentation |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 Scale Perspectives | Level Taught (B,I,A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 | B | lecture | exercise | global vs. regional mapping |
| GSP148 | B | lectures, websites | quiz | local versus regional and national food systems |
| GSP150 |  |  |  |  |
| GSP201 | B | lecture, reading assignments | assignments, quiz | codes, neighborhood quality, plans |
| GSP206 | I | lecture, discussion | facilitation, discussion | conflicts, participation issues |
| GSP220 | B | readings, videos, activities | quiz, written assignment | physical and human geography of the US |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | physical and human geography of Europe and the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | physical and human geography of Asia, Africa and the Pacific |
| GSP259 |  |  |  |  |
| GSP276 | B | readings, videos, activities | quiz, written assignment | environmental, social and economic sustainability |
| GSP303 | A | Lectures, design project, Field trip to L.A. | Flagstaff redesign project presentation; exams | Design issues and solutions for scales of house lots, neighborhoods, community, and region |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | A | lecture, worksheets, discussion | exams, worksheets | housing, policy, economics urbanization, census  |
| GSP375W |  |  |  |  |
| GSP376 | I | readings, videos, activities | quiz, written assignment | environmental, social and economic geography of tourism |
| GSP401 | A | lecture, projects | projects | codes. regional plan, agencies, impacts |
| GSP402 |  |  |  |  |
| GSP405C | A | project, report, discussion | project, report, poster | local plan, city-region impact, demographics and census |
| GSP406 | A | readings, videos, activities | quiz, written assignment | different scales of demographic and economic data from local to national |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 | A | lectures, projects | projects | census, agency use of GIS at varying scales, google earth/georeference, GIS and scale (ethics) |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 Physical Environment and Community | Level Taught (B,I,A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 | B | lecture, discussion | multiple labs |  |
| GSP148 | B | lectures, readings, discussions | quiz | natural resources, environment and food productions/traditions |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based exercises | physical environment processes (i.e. atmosphere, hydrosphere, lithosphere, biosphere) extensively covered |
| GSP201 | B | Lectures, websites | quiz | sustainable urban agriculture, physical environment and built environment |
| GSP206 |  |  |  |  |
| GSP220 | B | readings, videos, activities | quiz, written assignment | physical and human geography of the US |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | physical and human geography of Europe and the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | physical and human geography of Asia, Africa and the Pacific |
| GSP259 | I | lectures, readings, discussions | tests, labs, Google Earth-based exercises | global soils and geomorphic hazards |
| GSP276 | B | readings, videos, activities | quiz, written assignment | environmental, social and economic sustainability |
| GSP303 | I | Flagstaff redesign project, L.A. field trip | Flagstaff redesign project presentation, L.A. field trip presentation |  |
| GSP320 |  |  |  |  |
| GSP331 | I | Lecture, Data Analysis | Labs, projects |  |
| GSP365 |  |  |  |  |
| GSP371 | I | lectures, discussions, project | Caesar project, exam | city site and growth, resource use, hinterlands |
| GSP375W | I | readings, research project | reading assignments, research project report | Local community development influences on physical environment in Flagstaff and globally |
| GSP376 | I | readings, videos, activities | quiz, written assignment | environmental, social and economic geography of tourism |
| GSP401 | A | readings, lectures, projects | project | code, lighting, drainage, trees, landscaping and buffers |
| GSP402 |  |  |  |  |
| GSP405C |  |  |  |  |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 | ! | project, readings | project | site suitability  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 | A | Lecture, Data Analysis | Labs, Projects |  |
| GSP438 |  |  |  |  |
| GSP480C |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 4 Sense of Place  | Level Taught (B,I,A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 | B | discussion, reading | discussion | foodways and place |
| GSP150 |  |  |  |  |
| GSP201 | B | lecture, project | project | neighborhood character, urban places |
| GSP206 | B | project | project | facilitation project (places in the heart) |
| GSP220 | B | readings, videos, activities | quiz, written assignment | human geography of places in the US |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | human geography of Europe and the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | human geography of Asia, Africa and the Pacific |
| GSP259 |  |  |  |  |
| GSP276 | B | readings, videos, activities | quiz, written assignment | environmental, social and economic sustainability |
| GSP303 | A | lecture, Flagstaff redesign project, L.A. field trip | exams, Flagstaff redesign project presentation, L.A. field trip presentation | Concept of sense of place, placelessness, examples of good and poor sense of place, design approaches that improve or degrade sense of place.  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | I | lecture, exercise | project in class | cognitive mapping and sense of place, value to urban areas |
| GSP375W |  |  |  |  |
| GSP376 | I | readings, videos, activities | quiz, written assignment | environmental, social and economic geography of tourism |
| GSP401 | A | project | project | design controls/review |
| GSP402 |  |  |  |  |
| GSP405C | A | discussion | project | character (created versus existing, "Flagstaff" design |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C | A | individual or team research project | incorporation of sense of place into research report and presentation | reminders about sense of place and its implications for student research projects.  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 5 Geographic Context | Level Taught (B,I,A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 |  |  |  |  |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based excercises | selected reading and discussion topics based on current events |
| GSP201 |  |  |  |  |
| GSP206 |  |  |  |  |
| GSP220 | B | readings, videos, activities | quiz, written assignment | human geography of places and culture groups in the US |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | physical and human geography of Europe and the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | physical and human geography of Asia, Africa and the Pacific |
| GSP259 |  |  |  |  |
| GSP276 | B | readings, videos, activities | quiz, written assignment | environmental, social and economic sustainability |
| GSP303 | A | lectures, readings, Flagstaff redesign project | exams, reading assignments, Flagstaff redesign project presentation |  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | A | lectures, discussion, projects | exams, projects |  |
| GSP375W |  |  |  |  |
| GSP376 | I | readings, videos, activities | quiz, written assignment | environmental, social and economic geography of tourism |
| GSP401 | A | project | project | regulations, externalities |
| GSP402 |  |  |  |  |
| GSP405C | A | project | project | site concept plan, externalities |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 | A | readings, videos, activities | quiz, written assignment | covers the legal framework that defines the boundaries of local development options |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C | A | individual or team research project | incorporation of sense of place into research report and presentation | reminders about sense of place and its implications for student research projects.  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 Cultural Value Systems | Level Taught (B,I,A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 | I | lectures, readings, websites | quiz, discussion | foodways and immigration, identity, iconography |
| GSP150 |  |  |  |  |
| GSP201 | B | readings | discussion | values of differing groups |
| GSP206 | I | exercises, discussion | exercises, facilitation | conflict, values, facilitation |
| GSP220 | B | readings, videos, activities | quiz, written assignment | human geography of places and culture groups in the US |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | human geography of Europe and the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | human geography of Asia, Africa and the Pacific |
| GSP259 |  |  |  |  |
| GSP276 | B | readings, videos, activities | quiz, written assignment | environmental, social and economic sustainability |
| GSP303 |  |  |  |  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | A | discussion, readings, worksheet | exams, discussion | cultural urban areas and forms, global cities |
| GSP375W | I | lectures, readings, research project | exams, research project report, staff report | values supporting sustainable development |
| GSP376 | I | readings, videos, activities | quiz, written assignment | environmental, social and economic geography of tourism |
| GSP401 |  |  |  |  |
| GSP402 |  |  |  |  |
| GSP405C |  |  |  |  |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 | A | readings, videos, activities | quiz, written assignment | covers the legal framework that defines the boundaries of local development options |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 7 Perceptions of Change | Level Taught (B,I,A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 |  |  |  |  |
| GSP150 |  |  |  |  |
| GSP201 | B | lecture, project | project, discussion | neighborhood project response, discussion response |
| GSP206 |  |  |  |  |
| GSP220 | B | readings, videos, activities | quiz, written assignment | historical human geography of the US |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | historical geography of Europe and the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | historical geography of Asia, Africa and the Pacific |
| GSP259 |  |  |  |  |
| GSP276 | B | readings, videos, activities | quiz, written assignment | environmental, social and economic sustainability |
| GSP303 | I | L.A. field trip; Flagstaff redesign project | Field Trip presentation, Redesign presentation | impacts of historical planning patterns, suburbanization, and modernist planning practices. |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | I | exercise, discussions, sites, lecture | exercise, exam | cognitive mapping, life cycle, quality of life surveys |
| GSP375W |  |  |  |  |
| GSP376 | I | readings, videos, activities | quiz, written assignment | environmental, social and economic geography of tourism |
| GSP401 | A | lecture, project | project, exam | changes in community, conflict |
| GSP402 |  |  |  |  |
| GSP405C | A | project | project and presentation | project and presentation |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 | A | readings, videos, activities | quiz, written assignment | covers the legal framework that defines the boundaries of local development options |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C | A | Individual or team research project | research project report and presentation |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 8 Environmental System (Climate, biogeography, hydrology, geomorphology) | Level Taught (B,I,A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 | B | hands on mapping activities | labs |  |
| GSP148 | B | lectures, discussion, web sites | exams, discussions | environmental factors, limitations, resources re: food |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based exercises | concept extensively covered |
| GSP201 | B | lectures, readings, discussions | exams, discussion | environmental planning, NEPA |
| GSP206 |  |  |  |  |
| GSP220 | B | readings, videos, activities | quiz, written assignment | physical geography of the US |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | physical geography of Europe and the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | physical geography of Asia, Africa and the Pacific |
| GSP259 | I | lectures, readings, discussions | tests, labs, Google Earth-based exercises | geomorphic systems extensively covered |
| GSP276 | B | readings, videos, activities | quiz, written assignment | environmental, social and economic sustainability |
| GSP303 |  |  |  |  |
| GSP320 |  |  |  |  |
| GSP331 | I | Lecture, data analysis | labs, projects |  |
| GSP365 |  |  |  |  |
| GSP371 | I | lectures, video, discussion, project | exam, project | sustainability of human and environmental systems |
| GSP375W |  |  |  |  |
| GSP376 | I | readings, videos, activities | quiz, written assignment | environmental, social and economic geography of tourism |
| GSP401 | A | lecture, reading, project | exam, project | code requirements/physical environment and development |
| GSP402 |  |  |  |  |
| GSP405C | A | project | project | land development project |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 | I | projects, reading | projects | environmental overlays, site suitability |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 | A | Lecture, data analysis | labs, projects |  |
| GSP438 |  |  |  |  |
| GSP480C |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 9 Sustainable Development and Community Design | Level Taught (B,I,A) | How Addressed | Assessment Tools | Topics (if you want) |
|  |  |  |  |  |
| GSP130 | B | community mapping project | lab, project |  |
| GSP148 | B | reading, web sites | discussion | food systems and community sustainability |
| GSP150 |  |  |  |  |
| GSP201 | B | reading, web sites | exam | community sustainability and resilience |
| GSP206 | B | exercise | exercise | community participation as voice |
| GSP220 | B | readings, videos, activities | quiz, written assignment | sustainability and planning in the US |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment |  development in Europe and the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | development in Asia, Africa and the Pacific |
| GSP259 |  |  |  |  |
| GSP276 | B | readings, videos, activities | quiz, written assignment | environmental, social and economic sustainability |
| GSP303 | A | lectures, readings, L.A. field trip, Flagstaff redesign project | exams, reading assignments, Field trip presentation, Flag redesign presentation | Topics thoroughly covered throughout course.  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | I | lectures, project, discussion | exam, project | sustainable urban form and systems, "good" planning |
| GSP375W | I | readings, research project | reading assignments, research paper, staff report | concepts and examples of sustainable development with international cases. |
| GSP376 | I | readings, videos, activities | quiz, written assignment | environmental, social and economic geography of tourism |
| GSP401 | A | readings, project | exam, project | community design and codes |
| GSP402 |  |  |  |  |
| GSP405C | A | project | project | concept plan project |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 | A | readings, videos, activities | quiz, written assignment | covers the legal framework that defines the boundaries of local development options |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Our Diverse World*** |  |  |  |  |
| Concepts |  |  |  |  |
| 1 Scale Perspectives: Local, Regional and Global2 Environmental Variation and Human Differences3 Historical Evolution and Context of Places4 Awareness and Empathy for Other Peoples, Cultures and Environments5 Interaction with and Openness to Differences6 Interactions, Interrelations and Implications of Physical Environments and Human Variations |  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |  |  |  |
|  | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Concept |  |  |  |  |
| 1 Scale Perspectives: Local, Regional and Global | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 | B | hands on mapping | labs |  |
| GSP148 | B | lectures, readings, discussions  | quiz, paper | local and regional foods, immigration, national trends |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based exercises | physical process interactions among spatial scales (local, regional, continental, global) |
| GSP201 |  |  |  |  |
| GSP206 |  |  |  |  |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | physical and human geography from continents to places of Europe and all of the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | physical and human geography from continents to places of Africa, Asia and the Pacific realm |
| GSP259 | I | lectures, readings, discussions | tests, labs, Google Earth-based exercises | geomorphic process interactions among spatial scales (local, regional, continental, global) |
| GSP276 | B | readings, videos, activities | quiz, written assignment | sustainable tourism perspectives on place |
| GSP303 | I | L.A. Field trip, Flagstaff redesign project | Field trip presentation, Flagstaff redesign presentation | diverse perspectives at local, neighborhood levels, and regional distinctiveness.  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | A | lectures, readings, exercises | exam, projects | city systems and city as a unit, culture, econ, tech housing and change at multiple scales |
| GSP375W | I | readings, research project | reading assignments, research paper | case studies of local and regional diversity related to cultural backgrounds and values.  |
| GSP376 |  |  |  |  |
| GSP401 | A | project, readings, discussion | projects | local and regional land use planning |
| GSP402 | A | readings, papers | papers | local, federal policy implementation and impact |
| GSP405C | A | project, research, discussion | projects | community and city scale project impacts and needs |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 | I | readings, projects | projects, discussions | scale issues, projections, data levels |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 Environmental Variation and Human Differences | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 | B | lectures, readings, discussions | discussions, quiz | regional foodways, cultural groups, climate/soil variations |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based exercises | environmental variations extensively covered |
| GSP201 |  |  |  |  |
| GSP206 | I | activities, readings, lectures | exercises, exam | working successfully with various demographic groups |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | physical and human geography from continents to places of Europe and all of the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | physical and human geography from continents to places of Africa, Asia and the Pacific realm |
| GSP259 |  |  |  |  |
| GSP276 |  |  |  |  |
| GSP303 |  |  |  |  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | A | lectures, readings, discussions | exams, project | demographics and socioeconomic groups and the city, global cities, sustainability |
| GSP375W |  |  |  |  |
| GSP376 |  |  |  |  |
| GSP401 |  |  |  |  |
| GSP402 |  |  |  |  |
| GSP405C | A | research, discussions | project | demographics and character |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 | I | projects, readings | projects | mapping demographics and change |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 Historical Evolution and Context of Places | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 | B | lectures, readings, audio | quiz, discussion | evolution of foodways in US regions |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based exercises | physical process interactions among temporal scales (seconds to human lifespans to geologic time) |
| GSP201 |  |  |  |  |
| GSP206 |  |  |  |  |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | historical geography of Europe and all of the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | historical geography of Africa, Asia and the Pacific realm |
| GSP259 | I | lectures, readings, discussions | tests, labs, Google Earth-based exercises | landform change over time |
| GSP276 | B | readings, videos, activities | quiz, written assignment | sustainable tourism perspectives on place |
| GSP303 | I | readings, L.A. field trip, Flagstaff redesign project | reading assignments, field trip presentation, redesign presentation | Influence and importance of local historical context on place distinctiveness, and necessity of considering local historical context in urban design.  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | A | readings, lectures, worksheets | exam, project | evolution of cities, form, urbanization and landscape change, urban economic structure |
| GSP375W | I | lecture, readings, research project | essay exams, research paper | Historical context is thoroughly embedded throughout the course and projects.  |
| GSP376 |  |  |  |  |
| GSP401 |  |  |  |  |
| GSP402 |  |  |  |  |
| GSP405C | A | research, discussions | project | overview of historic contexts to area and plan |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C | A | capstone research project | research paper and presentation | Incorporation of historical context into research project is a substantial component of the capstone project.  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 4 Awareness and Empathy for Other Peoples, Cultures and Environments | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 | B | lectures, readings, responses | responses, quiz | peer differences, self awareness, cutural differences in foodways |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based exercises | awareness of global environmental diversity |
| GSP201 |  |  |  |  |
| GSP206 | I | readings, discussion, exercises | exercises, exam | working with various age, social, education or cultural groups |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | human geography of Europe and all of the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | human geography of Africa, Asia and the Pacific realm |
| GSP259 |  |  |  |  |
| GSP276 |  |  |  |  |
| GSP303 | I | readings, L.A. field trip, Flagstaff redesign project | reading assignments, field trip presentation, Flagstaff redesign presentation |  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | A | readings | exam | poverty in the city |
| GSP375W | A | lectures, readings, research project | essay exams, reading assignments, research paper and presentation | Global and developing world case studies of uneven and underdevelopment; analysis of primary and secondary research findings on diverse perspectives surrounding a local issue. Possible role playing exercise |
| GSP376 |  |  |  |  |
| GSP401 |  |  |  |  |
| GSP402 |  |  |  |  |
| GSP405C |  |  |  |  |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C | A | capstone research project | capstone research paper and presentation | Required evidence of empathy and awareness of others within the capstone research project and products.  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 5 Interaction with and Openness to Differences | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 |  |  |  |  |
| GSP148 | B | readings, papers, discussions, responses | papers, discussions, responses | similarities and differences with peers |
| GSP150 |  |  |  |  |
| GSP201 |  |  |  |  |
| GSP206 | I | readings, personality profile, discussions, exercises | exercises, exam | working with groups, various personalities |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | human geography of Europe and all of the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | human geography of Africa, Asia and the Pacific realm |
| GSP259 |  |  |  |  |
| GSP276 |  |  |  |  |
| GSP303 | I | readings, L.A. field trip, Flagstaff redesign project | reading assignments, field trip presentation, Flagstaff redesign presentation |  |
| GSP320 |  |  |  |  |
| GSP331 |  |  |  |  |
| GSP365 |  |  |  |  |
| GSP371 | I | group work project | successful project, group evaluation | successful project |
| GSP375W | A | lectures, readings, research project | essay exams, reading assignments, research paper and presentation | Global and developing world case studies of uneven and underdevelopment; analysis of primary and secondary research findings on diverse perspectives surrounding a local issue. Possible role playing exercise |
| GSP376 |  |  |  |  |
| GSP401 |  |  |  |  |
| GSP402 |  |  |  |  |
| GSP405C | A | group work | project and presentation | group work and project culmination |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 | I | discussions, responses | discussions, responses | interacting with peers and their opinions |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C | A | capstone research project, interview requirement and other research methods | capstone research paper and presentation | Required evidence of openness to difference within the capstone research project and products.  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 Interactions, Interrelations and Implications of Physical Environments and Human Variations | Level Taught (B, I, A) | How Addressed | Assessment Tools | Topics (if you want) |
| GSP130 | B | hands on mapping exercises | labs |  |
| GSP148 | B | lectures, readings | quiz | physical environment and food provision |
| GSP150 | B | lectures, readings, discussions | tests, labs, map-based exercises | interactions among realms of physical geography (i.e. atmosphere, hydrosphere, lithosphere, biosphere) extensively covered |
| GSP201 |  |  |  |  |
| GSP206 |  |  |  |  |
| GSP220 |  |  |  |  |
| GSP239 |  |  |  |  |
| GSP240 | B | readings, videos, activities | quiz, written assignment | human & physical geography of Europe and all of the Americas |
| GSP241 | B | readings, videos, activities | quiz, written assignment | human & physical geography of Africa, Asia and the Pacific realm |
| GSP259 | I | lectures, readings, discussions | tests, labs, Google Earth-based exercises | relations between landforms and physical controls (e.g. climate, hydrology, geology, humans) extensively covered |
| GSP276 | B | readings, videos, activities | quiz, written assignment | sustainable tourism perspectives on place |
| GSP303 | I | L.A. field trip, Flagstaff redesign project | field trip presentation, Flagstaff redesign presentation | consideration and research of local/regional physical/environmental characteristics as applied to diverse places (Los Angeles), and local redesign efforts.  |
| GSP320 |  |  |  |  |
| GSP331 | I | Lectures, data analysis | labs, projects |  |
| GSP365 |  |  |  |  |
| GSP371 |  |  |  |  |
| GSP375W | I | readings, research project | reading assignments, research paper and presentation |  |
| GSP376 |  |  |  |  |
| GSP401 | A | readings, projects | projects | resource calcs, flooodplains, dark sky |
| GSP402 |  |  |  |  |
| GSP405C | A | project, research discussion | projects | planning with physical constraints, floodplain, resource calcs |
| GSP406 |  |  |  |  |
| GSP408 |  |  |  |  |
| GSP421 |  |  |  |  |
| GSP423 |  |  |  |  |
| GSP432 |  |  |  |  |
| GSP433 |  |  |  |  |
| GSP435 |  |  |  |  |
| GSP436 |  |  |  |  |
| GSP437 |  |  |  |  |
| GSP438 |  |  |  |  |
| GSP480C | A | capstone research project | research paper and presentation | Students are required to include a substantial component of physical interactions and implications in their capstone research project.  |

**APPENDIX B**

**LIBERAL STUDIES AND GLI COURSE SHEETS**

***B.S. in Geographic Science and Community Planning***

Suggested Courses for the Global Learning Initiative and Liberal Studies

 Liberal Studies Designation

ES150 Intro to African American Studies (3) (D) AHI, Ethnic

ES 160 Intro to Latino(a)/Chicano(a) Studies (3) (D) AHI, Ethnic

ES100 Introduction to Ethnic Studies (3) (D) CU, Ethnic

ES 215 Race and Ethnic Relations (3) (D) SPW, Ethnic

ES 300 Global Race and Ethnic Relations (3) (G, D) SPW, Global

ES/POS 356 Race, Power and Politics (3) (D) CU, Ethnic

ES 378 Global Race & Ethnic Relations (3) (D) SPW, Ethnic

HUM362 Perspectives on Asian Humanities (3) (D, G) AHI, Global

COM 301 Race, Gender and the Media (3) (D) CU, Ethnic

PHI 150 Philosophies of the World (3) (G) AHI, Global

ART 150 Two-Dimensional Design Fundamentals (3) AHI

ART 151 Three-Dimensional Design Fundamentals (3) AHI

AIS 101 Introduction to Applied Indigenous Studies (3) (D) CU, Ethnic

AIS 202 Roots of Federal American Indian Policy (3) (D) SPW, Ethnic

AIS/POS 210 Current American Indian Government (3) (D) CU, Ethnic

ANT 205 Native Peoples of North America (3) (D) CU, Ethnic

ANT 306 Peoples of the Southwest (3) SPW, Ethnic

ARH 145 The Arts of Native North America, Africa and Oceania (3) (D) CU, Global

CCJ 395 Borders, Immigration and Human Rights (3) (G) SPW

ECO 284 Principles of Economics: Micro (3) SPW

ECO 285 Principles of Economics: Macro (3) SPW

GLG 100 Introductory Geology (3) and Lab (1) SAS, LAB

GLG 101 Physical Geology (3) (G) SAS

GLG 103 Physical Geology Lab (1) LAB

HIS 231 History of the Islamic World since 1500 (3) (G) CU, Global

HIS 293 American Indian History (3) (D) CU, Ethnic

HIS 367 Arizona and the Southwest, 1848-Present (3) (D) CU

HIS 381 United States-Mexico Borderlands (3) (D) CU, Ethnic

HIS 368 Making of the U.S. West (3) (S) CU

HIS 369 The U.S. West Transformed (3) (S) CU

HIS 388 U.S. Thought and Culture (3) (S) CU

HIS 221 History of Africa since 1800 (3) (G) CU, Global

HIS 280 Colonial Latin America (3) (G, D) CU, Global

HIS 281 Latin American from Independence to the Present (3) (G) CU, Global

HIS 332 Modern Japan (3) (G) CU, Global

HIS 382 Mexico Yesterday and Today (3) (G) CU, Global

HIS 295 Survey of U.S. Women and Gender (3) (D) CU

HUM 130 Introduction to Southwest Humanities (3) (D) AHI, ethnic

HUM 261 Asian Ideas and Values (3) (G, D) CU, Global

HUM 281 Latin American Ideas and Values (3) (G, D) CU, Global

HUM 291 American Multicultural Ideas and Values (3) (D) AHI, ethnic

HUM 381 Mexican Arts and Culture (3) (G, D) CU, Global

POS 120 World Politics (3) (G) CU

POS 355 Women, Power and Politics (3) (D) CU

CIS 120 Intro to Computer Information Systems (3) Science

CS 110 Intro to Computer Science (3) Science

CS 122 Programming for Engineering and Science Science

ENV 101 Introduction to Environmental Sciences (3) (S) Science

ENV/GLG 115 Climate Change (3) (S) Science

ENV 181 Environmental Sustainability (3) (S) Science

SC 111 Fundamentals of Public Speaking (3) SPW

SOC 215 Race and Ethnic Relations (3) (D) SPW, Ethnic

SOC 315 American Society and the American Indian (3) (D) CU, Ethnic

WGS 260 Third World Women (3) (G, D) SPW, Global

WGS 191 Women, Gender Identity, and Ethnicity (3) (D) CU, Ethnic

Global Learning Initiative:

G- GLOBAL AWARENESS AND ENGAGEMENT

S- SUSTAINABLE ENVIRONMENTS AND COMMUNITIES

D- OUR DIVERSE WORLD

***Community Planning and Development Emphasis***

Course suggestions for the Global Learning Initiative and Liberal Studies

 Liberal Studies

|  |  |  |
| --- | --- | --- |
| CM120 Building the Human Environment (3) (S, G) | CU |  |
| FOR 240 Introduction to Conservation Biology (3) (D) | SAS |  |
| FOR250 AZ Forests and Wildlife (3) (S, D) | SAS |  |
| FOR255 International Wildlife Issues (3) (S, G) | SAS, Global |  |
| COM150 Environmental Communication (3) (S) | SPW |  |
| ECO 284 Principles of Economics: Micro (3) (x) | SPW |  |
| ECO 285 Principles of Economics: Macro (3) (x) | SPW |  |
| HUM 376 Visions of Utopia (3) (S) | AHI |  |
| PHI 331 Environmental Ethics (3) (S) | AHI |  |
| POS 231 Politics and the Humanities (3) (D) | AHI |  |
| POS 250 Introduction to Public Policy Making (3) (x) | SPW |  |
| ANT 103 Culture in Communication (3) (D) | CUG |  |
| ANT 320 American Indian Politics and Policy (3) (D) | CU, Ethnic |  |
| PRM 350 Cultural Recreation (3) (D) | CU  |  |
| DIS 304 Introduction to Universal Design (3) (D) | SPW |  |
| ES 215 Racial and Ethnic Relations (3) (D) | SPW, Ethnic |  |
| FOR 222 Environmental Conservation (3) (S) | SPW |  |
| FOR 230 Multicultual Perspectives on Natural Resources Management (3) (D, S) | SPW, Ethnic |  |
| HIS 373 The City in U.S. History (3) (S) | SPW |  |
| HUM 395 Public Humanities (3) (S) | SPW |  |
| PRM 300 Ecotourism (3) (G, S, D) | Global |  |
| SC 151 Introduction to Interpersonal Communication (3) (D) | SPW |  |
| SC 323 Intercultural Communication (3) (D) | CU |  |

Of Additional interest: ESE 304 Introduction to Universal Design (D, S)

Global Learning Initiative:

G- GLOBAL AWARENESS AND ENGAGEMENT

S- SUSTAINABLE ENVIRONMENTS AND COMMUNITIES

D- OUR DIVERSE WORLD

***Geospatial Technologies Emphasis***

Suggested courses for the Global Learning Initiative and Liberal Studies

 Liberal Studies

|  |  |
| --- | --- |
| GLG 112 Geologic Disasters (and Lab) (4) (G) | LAB |
| GLG 304 Geology of Arizona (4)  | LAB |
| GLG 107 Oceanography (3) (G) | SAS |
| PHI 203 Scientific Reasoning (3) (D) | AHI |
| PHI 331 Environmental Ethics (3) (S) | AHI |
| PHS 101 Physical Science in Everyday Life (4)  | LAB |
| HUM 373 Nature and Values (3) (S) | CU |
| CS 122 Programming for Engineering and Science (3)  | Science |
| CD 212 Web Programming (3)  | Science |
| POS 159 Nature and Politics (3) (S) | SPW |
| POS 359 Environmental Policy (3) (S) | SPW |
| SOC 333 Environment and Society (3) (S) | SPW |
| ENV 101 Extreme Weather (3) (S) | Science |
| GLG 265 Earthquakes (4) (S) | LAB |
| FOR 340 Environmental Hydrology (4) (S) | LAB |
| EGR 190 Energy, Ecology and You (3) (S) |  |
| CENE 180 Computer Aided Drafting |  |
| CENE 270 Surveying |  |

Global Learning Initiative:

G- GLOBAL AWARENESS AND ENGAGEMENT

S- SUSTAINABLE ENVIRONMENTS AND COMMUNITIES

D- OUR DIVERSE WORLD