

Texas State University

Outcomes Report

General Information

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| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | Environmental Interpretation (certificate) |
| Program Code: | 3.01 |
| Outcome Type: | Student Learning (UG) |
| Degree: | Certificate - Undergraduate |
| Coordinator/Contact: | Mr. Mark Carter |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The Texas State Department of Geography Environmental Interpretation Certificate prepares students to work as interpretive guides in parks and other tourism venues and to work in the professional areas of public information/education in resource management agencies.

Evidence of Improvement

Action Plan

Outcome 1

Students will demonstrate their knowledge of how the Earth works as an energy / matter system as well as their knowledge of the characteristics of the Earth's lithosphere, atmosphere, hydrosphere, biosphere and cryosphere.

Outcome 1 - Method 1

Students will be evaluated on their knowledge of how the Earth works as an energy / matter system using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 1 - Method 1 - Result

Outcome 1 - Method 2

Students will be evaluated on their knowledge of the characteristics of the Earth's lithosphere, atmosphere, hydrosphere, biosphere and cryosphere using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 1 - Method 2 - Result

Outcome 2

Students will demonstrate their knowledge of the themes, principles and techniques for the effective interpretation of environmental information as well as their knowledge of interpretive geographic concepts and themes such as physical, ecological, cultural and historic landscapes and landscape features.

Outcome 2 - Method 1

Students will be evaluated on their knowledge of the themes, principles and techniques for the effective interpretation of environmental information using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 2 - Method 1 - Result

Outcome 2 - Method 2

Students will be evaluated on their knowledge of interpretive geographic concepts and themes such as physical, ecological, cultural and historic landscapes and landscape features using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 2 - Method 2 - Result

Outcome 3

Students will demonstrate their knowledge of the role of interpretation in resource management, particularly the protection of natural and cultural resources as well as their knowledge of the various traditional and digital techniques used by professional environmental interpreters to engage the public.

Outcome 3 - Method 1

Students will be evaluated on their knowledge of the role of interpretation in resource management, particularly the protection of natural and cultural resources using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 3 - Method 1 - Result

Outcome 3 - Method 2

Students will be evaluated on their knowledge of the various traditional and digital techniques used by professional environmental interpreters to engage the public using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 3 - Method 2 - Result

Approval History

Approval History Event

Approver

No Approval History Events

General Information

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|-----------------------------|-------------------------------------|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | GEO 1305 |
| Program Code: | 3.00 |
| Outcome Type: | General Education |
| Degree: | Other |
| Coordinator/Contact: | Mr. Mark Carter / Dr. Richard Dixon |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The mission of the general education core curriculum at Texas State University is to provide students with a broad academic foundation in the component areas of communication; mathematics; life and physical sciences; language, philosophy and culture; creative arts; American history; government/political science; and social and behavioral sciences.

Life and Physical Sciences Mission:

The mission of the life and physical sciences component is to focus on describing, explaining, and predicting natural phenomena using the scientific method.

Evidence of Improvement

Action Plan

Outcome 1

Students will describe interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.

Outcome 1 - Method 1

Students taking Meteorology (GEO 1305) will be evaluated during and/or at the end of the semester by course instructors on their knowledge of the natural phenomena of meteorology using embedded test questions administered during Meteorology (GEO 1305) class examinations. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the embedded test questions. (90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 1 - Method 1 - Result

Outcome 2

Competency: Critical Thinking

Students will demonstrate creative thinking innovation, inquiry, and analysis, evaluation and synthesis of information.

Outcome 2 - Method 1

Students taking Meteorology (GEO 1305) will be evaluated during and/or at the end of the semester by course instructors on their ability to apply the scientific method to the study of the natural phenomena of meteorology using climate and weather data with embedded test questions administered during Meteorology (GEO 1305) class examinations. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the embedded test questions. (90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 2 - Method 1 - Result

Outcome 3

Competency: Communication

Students will effectively develop, interpret and express ideas through written, oral and visual communication.

Outcome 3 - Method 1

Students taking Meteorology (GEO 1305) will be evaluated during and/or at the end of the semester by course instructors on their ability to use writing, speech and visualizations to express ideas about the natural phenomena of meteorology using an out-of-class project / presentation with grading rubric from the course: Meteorology (GEO 1305). Students' ability will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on an out-of-class project with grading rubric (90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or

exceed expectations for this outcome.

Outcome 3 - Method 1 - Result

Outcome 4

Competency: Empirical and Quantitative Skills

Students will manipulate and analyze numerical data or observable facts resulting in informed conclusions.

Outcome 4 - Method 1

Students taking Meteorology (GEO 1305) will be evaluated during and/or at the end of the semester by course instructors on their ability to manipulate and analyze numerical meteorological data and observable climatic and weather facts using an out-of-class project with grading rubric from the course: Meteorology (GEO 1305). Students' ability will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on an out-of-class project with grading rubric (90% - 100% = exceeded expectations, 70% - 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 4 - Method 1 - Result

Outcome 5

Competency: Teamwork

Students will recognize different points of view and work effectively with others to support a shared purpose or goal.

Outcome 5 - Method 1

Students taking Meteorology (GEO 1305) will be evaluated during and/or at the end of the semester by course instructors on their ability to work effectively with others to support a shared purpose and goal using an out-of-class group project with grading rubric from the course: Meteorology (GEO 1305). Students' ability will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on an out-of-class group project with grading rubric (90% - 100% = exceeded expectations, 70% - 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 5 - Method 1 - Result

Approval History

| Approval History Event | Approver |
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| No Approval History Events | |
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General Information

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|-----------------------------|------------------------------------|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | GEO 1310 |
| Program Code: | 8.00 |
| Outcome Type: | General Education |
| Degree: | Other |
| Coordinator/Contact: | Mr. Mark Carter / Dr. Brian Cooper |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The mission of the general education core curriculum at Texas State University is to provide students with a broad academic foundation in the component areas of communication; mathematics; life and physical sciences; language, philosophy and culture; creative arts; American history; government/political science; and social and behavioral sciences.

Social and Behavioral Sciences Mission:

The mission of the social and behavioral sciences component is to focus on the application of empirical and scientific methods that contribute to the understanding of what makes us human.

Evidence of Improvement

Action Plan

Outcome 1

Students will explore behavior and interactions among individuals, groups, institutions, and events, examining their impact on the individual, society, and culture.

Outcome 1 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on their knowledge of the major cultural features of the Earth and their impacts on the individual and society using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the embedded test questions. (90% - 100% = exceeded expectations, 70% - 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 1 - Method 1 - Result

Outcome 2

Competency: Critical Thinking

Students will demonstrate creative thinking innovation, inquiry, and analysis, evaluation and synthesis of information.

Outcome 2 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on their success in using creative thinking, innovation, inquiry, analysis, evaluation and synthesis of information to build their knowledge and understanding of the major physical features of the Earth using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the embedded test questions. (90% - 100% = exceeded expectations, 70% - 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 2 - Method 1 - Result

Outcome 3

Competency: Communication

Students will effectively develop, interpret and express ideas through written, oral and visual communication.

Outcome 3 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on their ability to develop, interpret and express ideas about the major physical and cultural aspects of world geography through written, oral and visual communication including the use of maps as a tool to locate and visualize the Earth's major physical and cultural features using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of exceeding,

meeting or failing to meet expectations, which will be determined by the students' total score on the embedded test questions. (90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 3 - Method 1 - Result

Outcome 4

Competency: Empirical and Quantitative Skills

Students will manipulate and analyze numerical data or observable facts resulting in informed conclusions.

Outcome 4 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on their ability to manipulate and analyze numerical data or observable facts for the world's regions resulting in informed conclusions to gain an understanding of the distribution and variation of the Earth's physical and cultural variables using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the embedded test questions. (90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 4 - Method 1 - Result

Outcome 5

Competency: Social Responsibility

Students will demonstrate intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.

Outcome 5 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on their ability demonstrate intercultural competence, knowledge of civic responsibility and the ability to engage effectively in regional, national and global communities through an understanding of the physical and cultural geographies of the Earth using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the embedded test questions. (90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 5 - Method 1 - Result

Approval History

| Approval History Event | Approver |
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| No Approval History Events | |
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General Information

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| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | Geographic Information Sciences (certificate) |
| Program Code: | 45.07 |
| Outcome Type: | Student Learning (UG) |
| Degree: | Certificate - Undergraduate |
| Coordinator/Contact: | Mr. Mark Carter |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The Texas State Department of Geography Geographic Information Science Certificate prepares students for professional positions using the theoretical and applied aspects of Geographic Information Science.

Evidence of Improvement

Action Plan

Outcome 1

Students will demonstrate their knowledge of the basics of Geographic Information Systems (GIS) including types of spatial data, data acquisition, data structure, data quality and data interpretation as well as their knowledge of GIS applications, GIS visualization and GIS modeling.

Outcome 1 - Method 1

Students will be evaluated on their knowledge of the basics of GIS including types of spatial data, data acquisition, data structure, data quality and data interpretation using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 1 - Method 1 - Result

Outcome 1 - Method 2

Students will be evaluated on their knowledge of the basics of GIS applications, GIS visualization and GIS modeling at the completion of all courses required for the certificate using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 1 - Method 2 - Result

Outcome 2

Students will demonstrate their knowledge of the technical aspects of GIS spatial data handling and analysis as well as their knowledge of the technical and theoretical aspects of spatial modeling including point pattern analysis, surface analysis and raster analysis.

Outcome 2 - Method 1

Students will be evaluated on their knowledge of the technical aspects of GIS spatial data handling and analysis using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 2 - Method 1 - Result

Outcome 2 - Method 2

Students will be evaluated on their knowledge of the technical and theoretical aspects of spatial modeling including point pattern analysis, surface analysis and raster analysis using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 2 - Method 2 - Result

Outcome 3

Students will demonstrate their knowledge of the basic concepts of cartography and map design principles as well as their knowledge of geographic data presentation, thematic map use and cartographic mapping techniques for quantitative and qualitative data.

Outcome 3 - Method 1

Students will be evaluated on their knowledge of the basic concepts of cartography and map design principles using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 3 - Method 1 - Result

Outcome 3 - Method 2

Students will be evaluated on their knowledge of geographic data presentation, thematic map use and cartographic mapping techniques for quantitative and qualitative data using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 3 - Method 2 - Result

Approval History

Approval History Event

Approver

No Approval History Events

General Information

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|-----------------------------|----------------------------------|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | Geography (BA/BS) |
| Program Code: | 45.07 |
| Outcome Type: | Student Learning (UG) |
| Degree: | Undergraduate |
| Coordinator/Contact: | Mr. Mark Carter |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

Geography prepares students for meaningful careers in both the public and private sectors by providing them a program of studies that focuses on the systematic study of the spatial distribution and interrelationships of people, natural resources, plant and animal life, including instruction in historical and political geography, cultural geography, economic and physical geography, regional science, cartographic methods, remote sensing, spatial analysis, and applications to areas such as land-use planning, development studies, and analyses of specific countries, regions, and resources.

In addition to general and specialized lecture-format courses, the Geography program offers a variety of project-based lab and field-trip experiences, career development through advising, job-shadowing and internships as well as team-building and leadership opportunities available by joining one or more geography department student organizations. Finally, the Geography program provides students with the foundation for a liberal education, preparing graduates to think independently, to choose free and to base personal and professional decisions on a broad understanding of the Earth's physical and cultural landscapes in order to live full, rewarding lives.

Evidence of Improvement

Action Plan

Outcome 1

Students will demonstrate their knowledge of the major physical features of the Earth such as mountains, deserts, rivers and oceans and their ability to locate examples of the Earth's major features on a map.

Outcome 1 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of the major physical features of the Earth using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 1 - Result

Outcome 1 - Method 2

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to locate examples of major physical features of the Earth on a map using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' ability will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 2 - Result

Outcome 2

Students will demonstrate their knowledge of the major cultural features of the Earth such as political boundaries, major agricultural regions and language groups and their ability to locate examples of Earth's major cultural features on a map.

Outcome 2 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of the major cultural features of the Earth using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 1 - Result

Outcome 2 - Method 2

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to locate examples of major cultural features of the Earth on a map using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' ability will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 2 - Result

Outcome 3

Students will demonstrate their knowledge of research methods used by geographers and their ability to use statistical software to solve geographic problems.

Outcome 3 - Method 1

Students taking Research Methods in Geography (GEO 3301) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of research methods using embedded test questions administered during Research Methods in Geography (GEO 3301) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (100% - 90% embedded test questions answered correctly); Meeting Expectations (89% - 70% embedded test questions answered correctly); or Failing to Meet Expectations (69% or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 1 - Result

Outcome 3 - Method 2

Students taking Research Methods in Geography (GEO 3301) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to use statistical software to solve geographic problems using a project graded with rubric. Students' ability will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 70%); or Failing to Meet Expectations (69% or less). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 2 - Result

Outcome 4

Students will demonstrate their knowledge of the foundations and theories of geographic information systems (GIS) and ability to use the tools and methods of GIS.

Outcome 4 - Method 1

Students taking Fundamentals of Geographic Information Systems (GEO 2426) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of geographic information systems using embedded test questions administered during Fundamentals of Geographic Information Systems (GEO 2426) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (100% - 90% embedded test questions answered correctly); Meeting Expectations (89% - 70% embedded test questions answered correctly); or Failing to Meet Expectations (69% or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 4 - Method 1 - Result

Outcome 4 - Method 2

Students taking Fundamentals of Geographic Information Systems (GEO 2426) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to use the tools and methods of GIS using a project graded with a rubric. Students' ability will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 70%); or Failing to Meet Expectations (69% or less). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 4 - Method 2 - Result

Outcome 5

Students will demonstrate their knowledge of physical geography and their ability to use scientific methods and techniques for observing,

measuring, recording and reporting on geographic phenomena.

Outcome 5 - Method 1

Students taking Field Methods (GEO 4430) Capstone Course will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of physical geography using embedded test questions administered during Field Methods (GEO 4430) class examinations. Specific embedded questions will target areas that need improvement as identified by the previous year's assessment. Students' knowledge will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 5 - Method 1 - Result

Outcome 5 - Method 2

Students taking Field Methods (GEO 4430) Capstone Course will be evaluated during and/or at the end of the semester by course instructors on the students' ability to use scientific methods and techniques for observing, measuring, recording and reporting on geographic phenomena using a project graded with a rubric. Students' ability will be assessed by the number of points received on the grading rubric on the basis of: Exceeding Expectations (10 points); Meeting Expectations (7 – 9 points); or Failing to Meet Expectations (6 or fewer points). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 5 - Method 2 - Result

Outcome 6

The academic program will promote and realize gains in student success.

Outcome 6 - Method 1

Student retention success will be measured by observing one year retention rates of students enrolled in the academic program from their freshman to sophomore year. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Rates of retention success will be expected to be at or above the university average for this level of program.

Outcome 6 - Method 1 - Result

Outcome 6 - Method 2

Student graduation success will be measured by observing the number of graduates from the academic program in during the fall, spring, and summer semesters and comparing the number of graduates to the number of students enrolled in the program. Data will be obtained from the university's certified enrollment records for the fall, spring, and summer semesters. The number of graduates is expected to be at or above the university rate of graduation for this level of program.

Outcome 6 - Method 2 - Result

Outcome 7

The academic program will promote and realize efficiency in the delivery and completion of the program.

Outcome 7 - Method 1

Delivery efficiency will be measured by reviewing the total number students enrolled in the academic program during the fall semester. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Delivery efficiency will be expected to increase from year to year.

Outcome 7 - Method 1 - Result

Outcome 7 - Method 2

Completion efficiency will be measured by observing the average time-to-completion for students in the academic program. Data will be obtained from the university's certified enrollment records for the fall semester. The time-to-completion of graduates is expected to be at or below the university average for this level of program.

Outcome 7 - Method 2 - Result

Approval History

Approval History Event

No Approval History Events

Approver

General Information

| | |
|-----------------------------|----------------------------------|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | Geography (MAGeo/MS) |
| Program Code: | 45.07 |
| Outcome Type: | Student Learning (GR) |
| Degree: | Masters |
| Coordinator/Contact: | Mr. Mark Carter |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The Master of Applied Geography (MAGeo) degree is designed to prepare students to use their skills and background knowledge to solve real-world problems with geographic dimensions and the Master of Science (MS) degree in Geography is designed to provide students with exposure to geographic theory and research at the pre-doctoral level. MAGeo students will be educated in the process of applied research in a spatial context culminating in the completion of a directed research project and MS students will be educated in the process of geographic research culminating in the completion of original research in the form of a MS thesis.

Evidence of Improvement

Action Plan

Outcome 1

Students will demonstrate their knowledge of geographic concepts, research methods and analytic techniques as well as their knowledge of the geographer's perspective on conducting and completing research on a wide range of scholarly and applied geographic topics.

Outcome 1 - Method 1

Students taking Geographical Analysis (GEO 5309) will be evaluated by course instructors on their knowledge of geographic concepts, research methods and analytic techniques using an embedded course assignment graded with a rubric during and / or at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 1 - Result

Outcome 1 - Method 2

Students taking Geographical Analysis (GEO 5309) will be evaluated by course instructors on their knowledge of the geographer's perspective on conducting and completing research on a wide range of scholarly and applied geographic topics using an embedded course assignment graded with a rubric during and / or at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 2 - Result

Outcome 2

Students will demonstrate their knowledge of multivariate quantitative methods including basic descriptive and inferential statistical techniques as well as their knowledge of advanced topics such as regression analysis and non-parametric analytical methods, spatial statistics and factor analysis.

Outcome 2 - Method 1

Multivariate Quantitative Methods (GEO 5301) course instructors will evaluate their students' knowledge of knowledge of multivariate quantitative methods including basic descriptive and inferential statistical techniques using questions embedded in the course midterm exam. Students' knowledge will be assessed on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 1 - Result

Outcome 2 - Method 2

Students taking Multivariate Quantitative Methods (GEO 5301) will be evaluated by course instructors will on their knowledge of advanced statistical topics such as regression analysis and non-parametric analytical methods, spatial statistics and factor analysis using questions embedded in the

course final exam. Students' knowledge will be assessed on the basis of: Exceeding Expectations (100% - 90% embedded test questions answered correctly); Meeting Expectations (89% - 80% embedded test questions answered correctly); or Failing to Meet Expectations (79% or fewer embedded test questions answered correctly). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 2 - Result

Outcome 3

Students will demonstrate their knowledge of the basic components of research grant proposals and their ability to critique research designs and manuscripts as well as their ability to produce a draft research proposal for their thesis.

Outcome 3 - Method 1

Students taking Advanced Geographic Research Design (GEO 7300) will be evaluated by course instructors on their knowledge of the basic components of research grant proposals and their ability to critique research designs and manuscripts using an embedded class assignment graded with a rubric during and / or at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 1 - Result

Outcome 3 - Method 2

Students taking Advanced Geographic Research Design (GEO 7300) will be evaluated by course instructors on their ability to produce a draft research proposal for their thesis graded with a rubric at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 2 - Result

Outcome 4

The academic program will promote and realize gains in student success.

Outcome 4 - Method 1

Student retention success will be measured by observing one year retention rates of students enrolled in the academic program from their first to second year. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Rates of retention success will be expected to be at or above the university average for this level of program.

Outcome 4 - Method 1 - Result

Outcome 4 - Method 2

Student graduation success will be measured by observing the number of graduates from the academic program in during the fall, spring, and summer semesters and comparing the number of graduates to the number of students enrolled in the program. Data will be obtained from the university's certified enrollment records for the fall, spring, and summer semesters. The number of graduates is expected to be at or above the university rate of graduation for this level of program.

Outcome 4 - Method 2 - Result

Outcome 5

The academic program will promote and realize efficiency in the delivery and completion of the program.

Outcome 5 - Method 1

Delivery efficiency will be measured by reviewing the total number students enrolled in the academic program during the fall semester. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Delivery efficiency will be expected to increase from year to year.

Outcome 5 - Method 1 - Result

Outcome 5 - Method 2

Completion efficiency will be measured by observing the average time-to-completion for students in the academic program. Data will be obtained from the university's certified enrollment records for the fall semester. The time-to-completion of graduates is expected to be at or below the

university average for this level of program.

Outcome 5 - Method 2 - Result

Approval History

Approval History Event

Approver

No Approval History Events

General Information

| | |
|----------------------|----------------------------------|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | Geography (PhD) |
| Program Code: | 45.07 |
| Outcome Type: | Student Learning (GR) |
| Degree: | Doctoral |
| Coordinator/Contact: | Mr. Mark Carter |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The doctoral degree in Geography is designed to provide depth and breadth of knowledge in geographic theory and research methods resulting in the completion of significant original research in the form of a PhD dissertation. Students will be educated in the process of geographic research, the development of new knowledge and methods and the application of research, techniques, pedagogy and geographic knowledge to address problems with spatial dimensions.

Evidence of Improvement

Action Plan

Outcome 1

Students will demonstrate their knowledge of the historical roots, development and contemporary philosophical and theoretical debates in the discipline of geography, as well as their ability to produce a term paper based on primary sources and formatted in the style of the *Annals of the Association of American Geographers*.

Outcome 1 - Method 1

Students taking Nature and Philosophy of Geography (GEO 7302) will be evaluated by course instructors on their knowledge of the historical roots, development and contemporary philosophical and theoretical debates in the discipline of geography using an embedded class assignment graded with a rubric during and / or at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 1 - Result

Outcome 1 - Method 2

Students taking Nature and Philosophy of Geography (GEO 7302) will be evaluated by course instructors on their ability to produce a term paper based on primary sources and formatted in the style of the *Annals of the Association of American Geographers* geography using an embedded class assignment graded with a rubric during and / or at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 2 - Result

Outcome 2

Students will demonstrate their advanced proficiency in the use of technical tools for geographic research including quantitative methods and other appropriate statistical tools for spatial analysis, as well as their ability to use statistical research tools to produce a research paper suitable for publication in a refereed journal.

Outcome 2 - Method 1

Students taking Advanced Quantitative Methods in Geography (GEO 7301) will be evaluated by course instructors on their advanced proficiency in the use of technical tools for geographic research including quantitative methods and other appropriate statistical tools for spatial analysis using an embedded class assignment graded with a rubric at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 1 - Result

Outcome 2 - Method 2

Students taking Advanced Quantitative Methods in Geography (GEO 7301) will be evaluated by course instructors on their ability to use statistical research tools to produce a research paper - suitable for publication in a refereed journal - graded with a rubric at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 2 - Result

Outcome 3

Students will demonstrate their knowledge of the basic components of research grant proposals and their ability to critique research designs and manuscripts, as well as their ability to produce a draft research proposal for their dissertation.

Outcome 3 - Method 1

Students taking Advanced Geographic Research Design (GEO 7300) will be evaluated by course instructors on their knowledge of the basic components of research grant proposals and their ability to critique research designs and manuscripts using an embedded class assignment graded with a rubric during and / or at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 1 - Result

Outcome 3 - Method 2

Students taking Advanced Geographic Research Design (GEO 7300) will be evaluated by course instructors on their ability to produce a draft research proposal for their dissertation graded with a rubric at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 2 - Result

Outcome 4

The academic program will promote and realize gains in student success.

Outcome 4 - Method 1

Student retention success will be measured by observing one year retention rates of students enrolled in the academic program from their first to second year. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Rates of retention success will be expected to be at or above the university average for this level of program.

Outcome 4 - Method 1 - Result

Outcome 4 - Method 2

Student graduation success will be measured by observing the number of graduates from the academic program in during the fall, spring, and summer semesters and comparing the number of graduates to the number of students enrolled in the program. Data will be obtained from the university's certified enrollment records for the fall, spring, and summer semesters. The number of graduates is expected to be at or above the university rate of graduation for this level of program.

Outcome 4 - Method 2 - Result

Outcome 5

The academic program will promote and realize efficiency in the delivery and completion of the program.

Outcome 5 - Method 1

Delivery efficiency will be measured by reviewing the total number students enrolled in the academic program during the fall semester. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Delivery efficiency will be expected to increase from year

to year.

Outcome 5 - Method 1 - Result

Outcome 5 - Method 2

Completion efficiency will be measured by observing the average time-to-completion for students in the academic program. Data will be obtained from the university's certified enrollment records for the fall semester. The time-to-completion of graduates is expected to be at or below the university average for this level of program.

Outcome 5 - Method 2 - Result

Approval History

Approval History Event

Approver

No Approval History Events

General Information

| | |
|-----------------------------|------------------------------------|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | GEOL 1410 |
| Program Code: | 3.00 |
| Outcome Type: | General Education |
| Degree: | Other |
| Coordinator/Contact: | Mr. Mark Carter / Dr. Suzon Jammes |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The mission of the general education core curriculum at Texas State University is to provide students with a broad academic foundation in the component areas of communication; mathematics; life and physical sciences; language, philosophy and culture; creative arts; American history; government/political science; and social and behavioral sciences.

Life and Physical Sciences Mission:

The mission of the life and physical sciences component is to focus on describing, explaining, and predicting natural phenomena using the scientific method.

Evidence of Improvement

Action Plan

Outcome 1

Students will describe interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.

Outcome 1 - Method 1

Students taking Physical Geology (GEOL 1410) will be evaluated during and/or at the end of the semester by course instructors on their knowledge of the natural phenomena of Earth's physical geology using embedded test questions administered during Physical Geology (GEOL 1410) class examinations. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the embedded test questions. (90% - 100% = exceeded expectations, 70% - 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 1 - Method 1 - Result

Outcome 2

Competency: Critical Thinking

Students will demonstrate creative thinking innovation, inquiry, and analysis, evaluation and synthesis of information.

Outcome 2 - Method 1

Students taking Physical Geology (GEOL 1410) will be evaluated during and/or at the end of the semester by course instructors on their ability to apply the scientific method to the study of the natural phenomena of physical geology using embedded test questions administered during Physical Geology (GEOL 1410) class examinations. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the embedded test questions. (90% - 100% = exceeded expectations, 70% - 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 2 - Method 1 - Result

Outcome 3

Competency: Communication

Students will effectively develop, interpret and express ideas through written, oral and visual communication.

Outcome 3 - Method 1

Students taking Physical Geology (GEOL 1410) will be evaluated during and/or at the end of the semester by course instructors on their ability to use writing, speech and visualizations to express ideas about the natural phenomena of physical geology using a lab project / presentation with grading rubric from the course: Physical Geology (GEOL 1410). Students' ability will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the lab project / presentation. (90% - 100% = exceeded expectations, 70% - 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed

expectations for this outcome.

Outcome 3 - Method 1 - Result

Outcome 4

Competency: Empirical and Quantitative Skills

Students will manipulate and analyze numerical data or observable facts resulting in informed conclusions.

Outcome 4 - Method 1

Students taking Physical Geology (GEOL 1410) will be evaluated during and/or at the end of the semester by course instructors on their ability to manipulate and analyze numerical physical geology data and observable physical geology facts using a lab project with grading rubric from the course: Physical Geology (GEOL 1410). Students' ability will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the lab project. (90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 4 - Method 1 - Result

Outcome 5

Competency: Teamwork

Students will recognize different points of view and work effectively with others to support a shared purpose or goal.

Outcome 5 - Method 1

Students taking Physical Geology (GEOL 1410) will be evaluated during and/or at the end of the semester by course instructors on their ability to work effectively with others to support a shared purpose and goal using a group lab project with grading rubric from the course: Physical Geology (GEOL 1410). Students' ability will be assessed on the basis of failure to meet, meet, or exceed expectations, which will be determined by the students' total score on a group lab project. (100% = exceeded expectations, 70% – 90% = met expectations, 60% = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 5 - Method 1 - Result

Approval History

| Approval History Event | Approver |
|------------------------|----------|
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No Approval History Events

General Information

| | |
|-----------------------------|--|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | GEOL 1420 |
| Program Code: | 3.00 |
| Outcome Type: | General Education |
| Degree: | Other |
| Coordinator/Contact: | Mr. Mark Carter / Dr. Dolores Van Der Kolk |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The mission of the general education core curriculum at Texas State University is to provide students with a broad academic foundation in the component areas of communication; mathematics; life and physical sciences; language, philosophy and culture; creative arts; American history; government/political science; and social and behavioral sciences.

Life and Physical Sciences Mission:

The mission of the life and physical sciences component is to focus on describing, explaining, and predicting natural phenomena using the scientific method.

Evidence of Improvement

Action Plan

Outcome 1

Students will describe interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.

Outcome 1 - Method 1

Students taking Historical Geology (GEOL 1420) will be evaluated during and/or at the end of the semester by course instructors on their knowledge of the natural phenomena of Earth's historical geology using embedded test questions administered during Historical Geology (GEOL 1420) class examinations. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the embedded test questions. (90% - 100% = exceeded expectations, 70% - 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 1 - Method 1 - Result

Outcome 2

Competency: Critical Thinking

Students will demonstrate creative thinking innovation, inquiry, and analysis, evaluation and synthesis of information.

Outcome 2 - Method 1

Students taking Historical Geology (GEOL 1420) will be evaluated during and/or at the end of the semester by course instructors on their ability to apply the scientific method to the study of the natural phenomena of historical geology using embedded test questions administered during Historical Geology (GEOL 1420) class examinations. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the embedded test questions. (90% - 100% = exceeded expectations, 70% - 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 2 - Method 1 - Result

Outcome 3

Competency: Communication

Students will effectively develop, interpret and express ideas through written, oral and visual communication.

Outcome 3 - Method 1

Students taking Historical Geology (GEOL 1420) will be evaluated during and/or at the end of the semester by course instructors on their ability to use writing, speech and visualizations to express ideas about the natural phenomena of historical geology using a lab project / presentation with grading rubric from the course: Historical Geology (GEOL 1420). Students' ability will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the lab project / presentation. (90% - 100% = exceeded expectations, 70% - 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed

expectations for this outcome.

Outcome 3 - Method 1 - Result

Outcome 4

Competency: Empirical and Quantitative Skills

Students will manipulate and analyze numerical data or observable facts resulting in informed conclusions.

Outcome 4 - Method 1

Students taking Historical Geology (GEOL 1420) will be evaluated during and/or at the end of the semester by course instructors on their ability to manipulate and analyze numerical historical geology data and observable historical geology facts using a lab project with grading rubric from the course: Historical Geology (GEOL 1420). Students' ability will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the lab project. (90% - 100% = exceeded expectations, 70% - 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 4 - Method 1 - Result

Outcome 5

Competency: Teamwork

Students will recognize different points of view and work effectively with others to support a shared purpose or goal.

Outcome 5 - Method 1

Students taking Historical Geology (GEOL 1420) will be evaluated during and/or at the end of the semester by course instructors on their ability to work effectively with others to support a shared purpose and goal using a group lab project with grading rubric from the course: Historical Geology (GEOL 1420). Students' ability will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the group lab project. (90% - 100% = exceeded expectations, 70% - 89% = met expectations, 69% or below = failed to meet expectations). We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 5 - Method 1 - Result

Approval History

| Approval History Event | Approver |
|------------------------|----------|
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| No Approval History Events | |
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General Information

| | |
|-----------------------------|----------------------------------|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | Location Analysis (certificate) |
| Program Code: | 45.07 |
| Outcome Type: | Student Learning (UG) |
| Degree: | Certificate - Undergraduate |
| Coordinator/Contact: | Mr. Mark Carter |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The Texas State Department of Geography Location Analysis Certificate prepares students to work as location analysis professionals in the public and private sectors analyzing spatial data to identify and optimize locations for business and public activities.

Evidence of Improvement

Action Plan

Outcome 1

Students will demonstrate their knowledge of the major concepts and theoretical framework of urban geography as well as their knowledge of the basic historical, social, political and economic processes that shape the urban environment.

Outcome 1 - Method 1

Students will be evaluated on their knowledge of the major concepts and theoretical framework of urban geography using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 1 - Method 1 - Result

Outcome 1 - Method 2

Students will be evaluated on their knowledge of the basic historical, social, political and economic processes that shape the urban environment using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 1 - Method 2 - Result

Outcome 2

Students will demonstrate their knowledge of the fundamentals of location analysis used to identify potential sites for industry, business, housing and community facilities as well as their knowledge of the spatial techniques that location analysis professionals use as part of an informed decision-making process to determine the best location for various types of land uses.

Outcome 2 - Method 1

Students will be evaluated on their knowledge the fundamentals of location analysis used to identify potential sites for industry, business, housing and community facilities using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 2 - Method 1 - Result

Outcome 2 - Method 2

Students will be evaluated on their knowledge the spatial techniques that location analysis professionals use as part of an informed decision-making process to determine the best location for various types of land uses using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89%

= met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 2 - Method 2 - Result

Outcome 3

Students will demonstrate their knowledge of the basics of Geographic Information Systems (GIS) including types of spatial data, data acquisition, data structure, data quality and data interpretation as well as their knowledge of GIS applications, GIS visualization and GIS modeling.

Outcome 3 - Method 1

Students will be evaluated on their knowledge of the basics of GIS including types of spatial data, data acquisition, data structure, data quality and data interpretation using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 3 - Method 1 - Result

Outcome 3 - Method 2

Students will be evaluated on their knowledge of the basics of GIS applications, GIS visualization and GIS modeling using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 3 - Method 2 - Result

Approval History

| Approval History Event | Approver |
|----------------------------|----------|
| No Approval History Events | |

General Information

| | |
|-----------------------------|---|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | Resource and Environmental Studies (BS) |
| Program Code: | 3.01 |
| Outcome Type: | Student Learning (UG) |
| Degree: | Undergraduate |
| Coordinator/Contact: | Mr. Mark Carter |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The Resource and Environmental Studies program prepares students for a wide variety of government and private sector occupations relating to resource conservation and/or environmental management. In addition to general and specialized lecture-format courses, the program offers a variety of project-based lab and field-trip experiences, career development through advising, job-shadowing and internships as well as team-building and leadership opportunities available by joining one or more geography department student organizations. The Resource and Environmental Studies program also prepares students for graduate programs in resource and environmental studies. Finally, the Resource and Environmental Studies program provides students with the foundation for a liberal education, preparing graduates to think independently, to choose freely and to base personal and professional decisions on a broad understanding of the Earth's physical and cultural landscapes in order to live full, rewarding lives.

Evidence of Improvement

Action Plan

Outcome 1

Students will demonstrate their knowledge of the major physical features of the Earth such as mountains, deserts, rivers and oceans and their ability to locate examples of the Earth's major features on a map.

Outcome 1 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of the major physical features of the Earth using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 1 - Result

Outcome 1 - Method 2

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to locate examples of major physical features of the Earth on a map using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' ability will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 2 - Result

Outcome 2

Students will demonstrate knowledge of the major cultural features of the Earth such as political boundaries, major agricultural regions and language groups and their ability to locate examples of Earth's major cultural features on a map.

Outcome 2 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of the major cultural features of the Earth using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 1 - Result

Outcome 2 - Method 2

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to locate examples of major cultural features of the Earth on a map using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' ability will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 2 - Result

Outcome 3

Students will demonstrate knowledge of quantitative methods used by geographers and their ability to use statistical software to solve geographic problems.

Outcome 3 - Method 1

Students taking Research Methods in Geography (GEO 3301) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of research methods using embedded test questions administered during Research Methods in Geography (GEO 3301) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (100% - 90% embedded test questions answered correctly); Meeting Expectations (89% - 70% embedded test questions answered correctly); or Failing to Meet Expectations (69% or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 1 - Result

Outcome 3 - Method 2

Students taking Research Methods in Geography (GEO 3301) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to use statistical software to solve geographic problems using a project graded with rubric. Students' ability will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 70%); or Failing to Meet Expectations (69% or less). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 2 - Result

Outcome 4

Students will demonstrate knowledge of the foundations and theories of geographic information systems (GIS) and their ability to use the tools and methods of GIS.

Outcome 4 - Method 1

Students taking Fundamentals of Geographic Information Systems (GEO 2426) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of geographic information systems using embedded test questions administered during Fundamentals of Geographic Information Systems (GEO 2426) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (100% - 90% embedded test questions answered correctly); Meeting Expectations (89% - 70% embedded test questions answered correctly); or Failing to Meet Expectations (69% or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 4 - Method 1 - Result

Outcome 4 - Method 2

Students taking Fundamentals of Geographic Information Systems (GEO 2426) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to use the tools and methods of GIS using a project graded with a rubric. Students' ability will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 70%); or Failing to Meet Expectations (69% or less). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 4 - Method 2 - Result

Outcome 5

Students will demonstrate their knowledge of resource and environmental issues and their ability to demonstrate the role that geography plays in analyzing resource / environmental degradation problems and improving resource / environmental management strategies.

Outcome 5 - Method 1

Students taking Environmental Management (GEO 4313) Capstone Course will be evaluated during and/or at the end the semester by course instructors on the students' knowledge of resource and environmental issues using embedded test administered during Environmental Management (GEO 4313) class examinations. Specific embedded questions will target areas that need improvement as identified by the previous year's assessment. Students' knowledge will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 5 - Method 1 - Result**Outcome 5 - Method 2**

Students Environmental Management (GEO 4313) Capstone Course will be evaluated during and/or at the end of the semester by course instructors on the students' ability to demonstrate the role that geography plays in analyzing resource / environmental degradation problems and improving resource / environmental management strategies using a project graded with a rubric. Students' ability will be assessed by the number of points received on the grading rubric on the basis of: Exceeding Expectations (10 points); Meeting Expectations (7 – 9 points); or Failing to Meet Expectations (6 or fewer points). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 5 - Method 2 - Result**Outcome 6**

The academic program will promote and realize gains in student success.

Outcome 6 - Method 1

Student retention success will be measured by observing one year retention rates of students enrolled in the academic program from their freshman to sophomore year. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Rates of retention success will be expected to be at or above the university average for this level of program.

Outcome 6 - Method 1 - Result**Outcome 6 - Method 2**

Student graduation success will be measured by observing the number of graduates from the academic program in during the fall, spring, and summer semesters and comparing the number of graduates to the number of students enrolled in the program. Data will be obtained from the university's certified enrollment records for the fall, spring, and summer semesters. The number of graduates is expected to be at or above the university rate of graduation for this level of program.

Outcome 6 - Method 2 - Result**Outcome 7**

The academic program will promote and realize efficiency in the delivery and completion of the program.

Outcome 7 - Method 1

Delivery efficiency will be measured by reviewing the total number students enrolled in the academic program during the fall semester. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Delivery efficiency will be expected to increase from year to year.

Outcome 7 - Method 1 - Result**Outcome 7 - Method 2**

Completion efficiency will be measured by observing the average time-to-completion for students in the academic program. Data will be obtained from the university's certified enrollment records for the fall semester. The time-to-completion of graduates is expected to be at or below the university average for this level of program.

Outcome 7 - Method 2 - Result**Approval History****Approval History Event**

No Approval History Events

Approver

General Information

| | |
|-----------------------------|--|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | Resource and Environmental Studies (MAGeo) |
| Program Code: | 3.01 |
| Outcome Type: | Student Learning (GR) |
| Degree: | Masters |
| Coordinator/Contact: | Mr. Mark Carter |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The Master of Applied Geography (MAGeo) degree in Resource and Environmental Studies is designed to prepare students to use their skills and background knowledge to solve real-world problems with geographic dimensions within environmental geography. Students will be educated in the process of applied research in a spatial context culminating in the completion of a directed research project.

Evidence of Improvement

Action Plan

Outcome 1

Students will demonstrate their knowledge of geographic concepts, research methods and analytic techniques as well as their knowledge of the geographer's perspective on conducting and completing research on a wide range of scholarly and applied geographic topics.

Outcome 1 - Method 1

Students taking Geographical Analysis (GEO 5309) will be evaluated by course instructors on their knowledge of geographic concepts, research methods and analytic techniques using an embedded course assignment graded with a rubric during and / or at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 1 - Result

Outcome 1 - Method 2

Students taking Geographical Analysis (GEO 5309) will be evaluated by course instructors on their knowledge of the geographer's perspective on conducting and completing research on a wide range of scholarly and applied geographic topics using an embedded course assignment graded with a rubric during and / or at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 2 - Result

Outcome 2

Students will demonstrate their knowledge of multivariate quantitative methods including basic descriptive and inferential statistical techniques as well as their knowledge of advanced topics such as regression analysis and non-parametric analytical methods. Students will demonstrate their knowledge of multivariate quantitative methods including basic descriptive and inferential statistical techniques as well as their knowledge of advanced topics such as regression analysis and non-parametric analytical methods, spatial statistics and factor analysis.

Outcome 2 - Method 1

Students taking Multivariate Quantitative Methods (GEO 5301) will be evaluated by course instructors on their knowledge of multivariate quantitative methods including basic descriptive and inferential statistical techniques using questions embedded in the course midterm exam. Students' knowledge will be assessed on the basis of: Exceeding Expectations (100% - 90% embedded test questions answered correctly); Meeting Expectations (89% - 80% embedded test questions answered correctly); or Failing to Meet Expectations (79% or fewer embedded test questions answered correctly). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 1 - Result

Outcome 2 - Method 2

Students taking Multivariate Quantitative Methods (GEO 5301) will be evaluated by course instructors will on their knowledge of advanced statistical topics such as regression analysis and non-parametric analytical methods, spatial statistics and factor analysis using questions embedded in the

course final exam. Students' knowledge will be assessed on the basis of: Exceeding Expectations (100% - 90% embedded test questions answered correctly); Meeting Expectations (89% - 80% embedded test questions answered correctly); or Failing to Meet Expectations (79% or fewer embedded test questions answered correctly). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 2 - Result

Outcome 3

Students will demonstrate their ability to use their knowledge of the components of research design - including problem definition, theory, literature review, methodology and analysis - to prepare a draft research proposal as well as their ability to produce and present a 'defense-style' final research proposal.

Outcome 3 - Method 1

Students taking Applied Research Design and Techniques (GEO 5300) will be evaluated by course instructors on their ability to use their knowledge of the components of research design - including problem definition, theory, literature review, methodology and analysis - to prepare a draft research proposal graded with a rubric during the midterm of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 1 - Result

Outcome 3 - Method 2

Student taking Applied Research Design and Techniques (GEO 5300) will be evaluated by course instructors on their ability to produce and present a 'defense-style' final research proposal graded with a rubric at the end of the semester. Students' knowledge will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 80%); or Failing to Meet Expectations (79% or less). We expect at least 80% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 2 - Result

Outcome 4

The academic program will promote and realize gains in student success.

Outcome 4 - Method 1

Student retention success will be measured by observing one year retention rates of students enrolled in the academic program from their first to second year. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Rates of retention success will be expected to be at or above the university average for this level of program.

Outcome 4 - Method 1 - Result

Outcome 4 - Method 2

Student graduation success will be measured by observing the number of graduates from the academic program in during the fall, spring, and summer semesters and comparing the number of graduates to the number of students enrolled in the program. Data will be obtained from the university's certified enrollment records for the fall, spring, and summer semesters. The number of graduates is expected to be at or above the university rate of graduation for this level of program.

Outcome 4 - Method 2 - Result

Outcome 5

The academic program will promote and realize efficiency in the delivery and completion of the program.

Outcome 5 - Method 1

Delivery efficiency will be measured by reviewing the total number students enrolled in the academic program during the fall semester. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Delivery efficiency will be expected to increase from year to year.

Outcome 5 - Method 1 - Result

Outcome 5 - Method 2

Completion efficiency will be measured by observing the average time-to-completion for students in the academic program. Data will be obtained

from the university's certified enrollment records for the fall semester. The time-to-completion of graduates is expected to be at or below the university average for this level of program.

Outcome 5 - Method 2 - Result

Approval History

Approval History Event

Approver

No Approval History Events

General Information

| | |
|-----------------------------|----------------------------------|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | Urban and Regional Planning (BS) |
| Program Code: | 4.03 |
| Outcome Type: | Student Learning (UG) |
| Degree: | Undergraduate |
| Coordinator/Contact: | Mr. Mark Carter |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The Urban and Regional Planning program prepares students for a wide variety of government and private sector employment opportunities relating to land-use, transportation, economic development, natural resource and waste-management planning occupations. The Urban and Regional Planning program provides students with the knowledge and skills required to evaluate and facilitate programs that benefit our neighborhoods, communities, cities, and regions. In addition to general and specialized lecture-format courses, the program offers a variety of project-based lab and field-trip experiences, career development through advising, job-shadowing and internships as well as team-building and leadership opportunities available by joining one or more geography department student organizations. The Urban and Regional Planning program also prepares students for graduate studies in planning and planning-related fields. Finally, the Urban and Regional Planning program provides students with the foundation for a liberal education, preparing graduates to think independently, to choose freely and to base personal and professional decisions on a broad understanding of the Earth's physical and cultural landscapes in order to live full, rewarding lives.

Evidence of Improvement

Action Plan

Outcome 1

Students will demonstrate knowledge of the major physical features of the Earth such as mountains, deserts, rivers and oceans and their ability to locate examples of the Earth's major features on a map.

Outcome 1 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of the major physical features of the Earth using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 1 - Result

Outcome 1 - Method 2

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to locate examples of major physical features of the Earth on a map using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' ability will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 2 - Result

Outcome 2

Students will demonstrate knowledge of the major cultural features of the Earth such as political boundaries, major agricultural regions and language groups and their ability to locate examples of Earth's major cultural features on a map.

Outcome 2 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of the major cultural features of the Earth using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 1 - Result

Outcome 2 - Method 2

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to locate examples of major cultural features of the Earth on a map using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' ability will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 2 - Result

Outcome 3

Students will demonstrate knowledge of quantitative methods used by geographers and their ability to use statistical software to solve geographic problems.

Outcome 3 - Method 1

Students taking Research Methods in Geography (GEO 3301) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of research methods using embedded test questions administered during Research Methods in Geography (GEO 3301) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (100% - 90% embedded test questions answered correctly); Meeting Expectations (89% - 70% embedded test questions answered correctly); or Failing to Meet Expectations (69% or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 1 - Result

Outcome 3 - Method 2

Students taking Research Methods in Geography (GEO 3301) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to use statistical software to solve geographic problems using a project graded with rubric. Students' ability will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 70%); or Failing to Meet Expectations (69% or less). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 2 - Result

Outcome 4

Students will demonstrate knowledge of the foundations and theories of geographic information systems (GIS) and their ability to use the tools and methods of GIS.

Outcome 4 - Method 1

Students taking Fundamentals of Geographic Information Systems (GEO 2426) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of geographic information systems using embedded test questions administered during Fundamentals of Geographic Information Systems (GEO 2426) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (100% - 90% embedded test questions answered correctly); Meeting Expectations (89% - 70% embedded test questions answered correctly); or Failing to Meet Expectations (69% or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 4 - Method 1 - Result

Outcome 4 - Method 2

Students taking Fundamentals of Geographic Information Systems (GEO 2426) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to use the tools and methods of GIS using a project graded with a rubric. Students' ability will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 70%); or Failing to Meet Expectations (69% or less). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 4 - Method 2 - Result

Outcome 5

Students will demonstrate their knowledge of urban and regional planning and their ability to demonstrate how effective urban planning influences the utility of the land and infrastructure.

Outcome 5 - Method 1

Students taking Planning Practicum (GEO 4338) Capstone Course will be evaluated during and/or at the end the semester by course instructors on the students' knowledge of urban and regional planning using embedded test administered during Planning Practicum (GEO 4338) class examinations. Specific embedded questions will target areas that need improvement as identified by the previous year's assessment. Students' knowledge will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 5 - Method 1 - Result

Outcome 5 - Method 2

Students taking Planning Practicum (GEO 4338) Capstone Course will be evaluated during and/or at the end of the semester by course instructors on the students' ability to create a land-use plan in order to demonstrate how effective urban planning influences the utility of the land and infrastructure using a project graded with a rubric. Students' ability will be assessed by the number of points received on the grading rubric on the basis of: Exceeding Expectations (10 points); Meeting Expectations (7 – 9 points); or Failing to Meet Expectations (6 or fewer points). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 5 - Method 2 - Result

Outcome 6

The academic program will promote and realize gains in student success.

Outcome 6 - Method 1

Student retention success will be measured by observing one year retention rates of students enrolled in the academic program from their freshman to sophomore year. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Rates of retention success will be expected to be at or above the university average for this level of program.

Outcome 6 - Method 1 - Result

Outcome 6 - Method 2

Student graduation success will be measured by observing the number of graduates from the academic program in during the fall, spring, and summer semesters and comparing the number of graduates to the number of students enrolled in the program. Data will be obtained from the university's certified enrollment records for the fall, spring, and summer semesters. The number of graduates is expected to be at or above the university rate of graduation for this level of program.

Outcome 6 - Method 2 - Result

Outcome 7

The academic program will promote and realize efficiency in the delivery and completion of the program.

Outcome 7 - Method 1

Delivery efficiency will be measured by reviewing the total number students enrolled in the academic program during the fall semester. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Delivery efficiency will be expected to increase from year to year.

Outcome 7 - Method 1 - Result

Outcome 7 - Method 2

Completion efficiency will be measured by observing the average time-to-completion for students in the academic program. Data will be obtained from the university's certified enrollment records for the fall semester. The time-to-completion of graduates is expected to be at or below the university average for this level of program.

Outcome 7 - Method 2 - Result

Approval History

Approval History Event

No Approval History Events

Approver

General Information

| | |
|-----------------------------|----------------------------------|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | Water Resources (BS) |
| Program Code: | 3.02 |
| Outcome Type: | Student Learning (UG) |
| Degree: | Undergraduate |
| Coordinator/Contact: | Mr. Mark Carter |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The Water Studies program provides students with a focused study of the physical, chemical, social, political, and economic factors of water resources from the geographic perspective in preparation for employment in both the public and private sectors. As water resources become ever more critical to the nation - and in particular Texas - this program addresses the increasing need for professionals in this crucial field. In addition to general and specialized lecture-format courses, the program offers a variety of project-based lab and field-trip experiences, career development through advising, job-shadowing and internships as well as team-building and leadership opportunities available by joining one or more geography department student organizations. The Water Studies program also prepares students for graduate studies. Finally, the Water Studies program provides students with the foundation for a liberal education, preparing graduates to think independently, to choose freely and to base personal and professional decisions on a broad understanding of the Earth's physical and cultural landscapes in order to live full, rewarding lives.

Evidence of Improvement

Action Plan

Outcome 1

Students will demonstrate knowledge of the major physical features of the Earth such as mountains, deserts, rivers and oceans and their ability to locate examples of the Earth's major features on a map.

Outcome 1 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of the major physical features of the Earth using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 1 - Result

Outcome 1 - Method 2

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to locate examples of major physical features of the Earth on a map using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' ability will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 1 - Method 2 - Result

Outcome 2

Students will demonstrate knowledge of the major cultural features of the Earth such as political boundaries, major agricultural regions and language groups and their ability to locate examples of Earth's major cultural features on a map.

Outcome 2 - Method 1

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of the major cultural features of the Earth using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 1 - Result

Outcome 2 - Method 2

Students taking World Geography (GEO 1310) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to locate examples of major cultural features of the Earth on a map using embedded test questions administered during World Geography (GEO 1310) class examinations. Students' ability will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 2 - Method 2 - Result

Outcome 3

Students will demonstrate knowledge of quantitative methods used by geographers and their ability to use statistical software to solve geographic problems.

Outcome 3 - Method 1

Students taking Research Methods in Geography (GEO 3301) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of research methods using embedded test questions administered during Research Methods in Geography (GEO 3301) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (100% - 90% embedded test questions answered correctly); Meeting Expectations (89% - 70% embedded test questions answered correctly); or Failing to Meet Expectations (69% or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 3 - Method 1 - Result

Outcome 3 - Method 2

Students taking Research Methods in Geography (GEO 3301) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to use statistical software to solve geographic problems using a project graded with rubric. Students' ability will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 70); or Failing to Meet Expectations (69% or less). We expect at least 70% of the students will meet or exceed expectations for this outcome / method

Outcome 3 - Method 2 - Result

Outcome 4

Students will demonstrate knowledge of the foundations and theories of geographic information systems (GIS) and their ability to use the tools and methods of GIS.

Outcome 4 - Method 1

Students taking Fundamentals of Geographic Information Systems (GEO 2426) will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of geographic information systems using embedded test questions administered during Fundamentals of Geographic Information Systems (GEO 2426) class examinations. Students' knowledge will be assessed on the basis of: Exceeding Expectations (100% - 90% embedded test questions answered correctly); Meeting Expectations (89% - 70% embedded test questions answered correctly); or Failing to Meet Expectations (69% or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 4 - Method 1 - Result

Outcome 4 - Method 2

Students taking Fundamentals of Geographic Information Systems (GEO 2426) will be evaluated during and/or at the end of the semester by course instructors on the students' ability to use the tools and methods of GIS using a project graded with a rubric. Students' ability will be assessed by the percentage of points received on the grading rubric on the basis of: Exceeding Expectations (100% - 90%); Meeting Expectations (89% - 70%); or Failing to Meet Expectations (69% or less). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 4 - Method 2 - Result

Outcome 5

Students will demonstrate their knowledge of the formation, use, conservation and management of water resources including legal, economic, political and societal factors as well as the evaluation of attempts to manage water resources and their ability to show how hydrology, water availability and quality, hazards, use, demand and allocation influence water resource management.

Outcome 5 - Method 1

Students taking Water Resources (GEO 3434) Capstone Course will be evaluated during and/or at the end of the semester by course instructors on the students' knowledge of water resources using embedded test questions administered during Water Resources (GEO 3434) class examinations. Specific embedded questions will target areas that need improvement as identified by the previous year's assessment. Students' knowledge will be assessed on the basis of: Exceeding Expectations (10 embedded test questions answered correctly); Meeting Expectations (7 - 9 embedded test questions answered correctly); or Failing to Meet Expectations (6 or fewer embedded test questions answered correctly). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 5 - Method 1 - Result

Outcome 5 - Method 2

Students taking Water Resources (GEO 3434) Capstone Course will be evaluated during and/or at the end of the semester by course instructors on the students' ability to show how hydrology, water availability and quality, hazards, use, demand and allocation influence water resource management using a project graded with a rubric. Students' ability will be assessed by the number of points received on the grading rubric on the basis of: Exceeding Expectations (10 points); Meeting Expectations (7 - 9 points); or Failing to Meet Expectations (6 or fewer points). We expect at least 70% of the students will meet or exceed expectations for this outcome / method.

Outcome 5 - Method 2 - Result

Outcome 6

The academic program will promote and realize gains in student success.

Outcome 6 - Method 1

Student retention success will be measured by observing one year retention rates of students enrolled in the academic program from their freshman to sophomore year. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Rates of retention success will be expected to be at or above the university average for this level of program.

Outcome 6 - Method 1 - Result

Outcome 6 - Method 2

Student graduation success will be measured by observing the number of graduates from the academic program in during the fall, spring, and summer semesters and comparing the number of graduates to the number of students enrolled in the program. Data will be obtained from the university's certified enrollment records for the fall, spring, and summer semesters. The number of graduates is expected to be at or above the university rate of graduation for this level of program.

Outcome 6 - Method 2 - Result

Outcome 7

The academic program will promote and realize efficiency in the delivery and completion of the program.

Outcome 7 - Method 1

Delivery efficiency will be measured by reviewing the total number students enrolled in the academic program during the fall semester. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Delivery efficiency will be expected to increase from year to year.

Outcome 7 - Method 1 - Result

Outcome 7 - Method 2

Completion efficiency will be measured by observing the average time-to-completion for students in the academic program. Data will be obtained from the university's certified enrollment records for the fall semester. The time-to-completion of graduates is expected to be at or below the university average for this level of program.

Outcome 7 - Method 2 - Result

Approval History

Approval History Event

No Approval History Events

Approver

General Information

| | |
|-----------------------------|--------------------------------------|
| Academic Year: | 2019-2020 |
| College: | Liberal Arts |
| Department: | Geography |
| Program: | Water Resources Policy (certificate) |
| Program Code: | 3.02 |
| Outcome Type: | Student Learning (UG) |
| Degree: | Certificate - Undergraduate |
| Coordinator/Contact: | Mr. Mark Carter |
| Status: | Entry Meets Minimum Requirements |

Mission Statement

The Texas State Department of Geography Water Resources Policy Certificate prepares students for professional water resources management and policy career positions.

Evidence of Improvement

Action Plan

Outcome 1

Students will demonstrate their knowledge of the major natural, legal, social and economic concepts of water resources as well as their knowledge of the environmental aspects of water issues.

Outcome 1 - Method 1

Students will be evaluated on their knowledge of the major natural, legal, social and economic concepts of water resources using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 1 - Method 1 - Result

Outcome 1 - Method 2

Students will be evaluated on their knowledge of the environmental aspects of water issues using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 1 - Method 2 - Result

Outcome 2

Students will demonstrate their knowledge of the natural / physical, technical, institutional and economic issues that influence river basin management as well as their knowledge of specific examples of river basin management issues in Texas, U.S. and internationally.

Outcome 2 - Method 1

Students will be evaluated on their knowledge of the natural/physical, technical, institutional and economic issues that influence river basin management using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 2 - Method 1 - Result

Outcome 2 - Method 2

Students will be evaluated on their knowledge of specific examples of river basin management issues in Texas, U.S. and internationally using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 2 - Method 2 - Result

Outcome 3

Students will demonstrate their knowledge of the institutional and legal frameworks within which water policy issues are debated and decided as well as their knowledge of the roles the executive, legislative and judicial branches of government play in determining water policy.

Outcome 3 - Method 1

Students will be evaluated on their knowledge of the institutional and legal frameworks within which water policy issues are debated and decided using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 3 - Method 1 - Result

Outcome 3 - Method 2

Students will be evaluated on their knowledge of the roles the executive, legislative and judicial branches of government play in determining water policy using an exit examination administered by the learning outcomes coordinator at the completion of all courses required for the certificate. Students' knowledge will be assessed on the basis of exceeding, meeting or failing to meet expectations, which will be determined by the students' total score on the exit examination. 90% - 100% = exceeded expectations, 70% – 89% = met expectations, 69% or below = failed to meet expectations. We expect at least 70% of the students will meet or exceed expectations for this outcome.

Outcome 3 - Method 2 - Result

Approval History

Approval History Event

Approver

No Approval History Events