

**ASSESSMENT PLAN: B.S. Geography****Date Updated: FALL 2024****PROGRAM MISSION**

CSUEB Geography B.S. Program Description:

The Geography Bachelor of Science (B.S.) program focuses on the study of spatial distributions, relations, processes and outcomes within the human-environment system. Attention is centered on historical and contemporary human activities in the natural and built environment, and on people as the major physical, social, cultural and economic change agents across the Earth's surface. A curriculum in Geography helps students understand the world's physical, social, economic and cultural landscapes and how they have been transformed or altered by either the Earth's natural processes or human modifications, and the future sustainability of our current actions in the light of our past experiences and ongoing trends such as urbanization, globalization and climate change.

At Cal State East Bay, Geography B.S. students can choose from a variety of upper division electives depending on their interests and career goals. A B.S. in Geography provides a valuable multi-perspective education of vital importance in this age of globalization and cumulative environmental change, a period that scientists are labeling the "Anthropocene". Graduates are primed to enter multiple professional fields or go on to a range of graduate programs related to environmental and resource management, planning and administration, sustainable development, and spatial data analysis. The major requires 44-45 units, 15 lower division and 29-30 upper division. Majors thus have lots of discretionary units not required for the major or general education with which they can deepen their earth and environmental science knowledge and skill set, or pursue a second major, one or more minors, and/or a Certificate in GIS and Remote Sensing. The lower division portion aligns with the California Community College transfer Associate of Arts degree in Geography.

**PROGRAM LEARNING OUTCOMES (PLOs)**

Students graduating with a B.S. in Geography will be able to:

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| <i>PLO 1</i> | PLO 1 Synthesize geographic knowledge, apply research strategies and use quantitative tools to solve problems of a geographic nature and relevant to a changing world (e.g. in resource management, spatial analysis, environmental change, and sustainable development) |
| <i>PLO 2</i> | PLO 2 Identify and communicate key geographical processes, ideas, concepts and outcomes orally, in writing, and through the use of geographical information systems (GIS) and other spatial representations.   |
| <i>PLO 3</i> | PLO 3 Identify, describe and explain the environmental, social, cultural, economic and other key characteristics and dynamics in different geographic contexts.  |
| <i>PLO 4</i> | PLO 4 Demonstrate effective teamwork ability by contributing to successful execution of group projects in the classroom, GIS laboratory and/or in the field.   |
| <i>PLO 5</i> | PLO 5 Identify, describe and explain how local, regional and global environmental, human societal, and economic processes and their outcomes are related to sustainable development.   |

**Year 1: 2025-26**

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| 1. Which PLO(s) to assess   | PLO#1 Synthesize geographic knowledge, apply research strategies and use quantitative tools to solve problems of a geographic nature and relevant to a changing world (e.g. in resource management, spatial analysis, environmental change, and sustainable development)  |
| 2. Is it aligned to an ILO? | Yes   |
| 3. If yes, list ILO.        | Thinking and Reasoning  |
| 4. Course name and number   | EEES 499 Capstone Seminar in Earth, Environmental and Sustainability Sciences   |
| 5. SLO from course          | CLO#2. Synthesize and integrate information on aspects of physical sciences, law, policy, economics and social science, as applicable, in an assessment of the selected topic.<br>CLO#3. Demonstrate the ability to gather, evaluate and articulate earth, environmental and sustainability sciences information through advanced written and oral communication. |

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| 6. <i>Assessment activity</i>       | Data analysis and final project  |
| 7. <i>Assessment Instrument</i>     | Faculty rating of student achievement (outstanding, proficient, still developing) using department rubric  |
| 8. <i>How data will be reported</i> | Quantitative and qualitative   |
| 9. <i>Responsible person(s)</i>     | EESC Faculty Instructor (TBD)  |
| 10. <i>Time (which semester(s))</i> | Spring 2026  |
| 11. <i>Ways of closing the loop</i> | Reports first to the Chair and then to the entire faculty for comment & discussion. An end-of-year meeting will be devoted to evaluating assessment results and "closing the loop."<br>Identified "areas for improvement" will be incorporated into modified/updated core courses for future majors. |

#### Year 2: 2026-27

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| 1. <i>Which PLO(s) to assess</i>   | PLO#2 Identify and communicate key geographical processes, ideas, concepts and outcomes orally, in writing, and through the use of geographical information systems (GIS) and other spatial representations.                     |
| 2. <i>Is it aligned to an ILO?</i> | Yes  |
| 3. <i>If yes, list ILO.</i>        | Communication  |
| 4. <i>Course name and number</i>   | EEES 460 Advanced GIS in Earth, Environmental and Sustainability Sciences  |
| 5. <i>SLO from course</i>          | CLO#3 Execute a research-based analysis of an earth, environmental and sustainability science issue using industry standard GIS software to demonstrate mapping, monitoring, analysis, management and/or solution of that issue. |

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| 6. <i>Assessment activity</i>       | Data analysis and final project  |
| 7. <i>Assessment Instrument</i>     | Faculty rating of student achievement (outstanding, proficient, still developing) using department rubric  |
| 8. <i>How data will be reported</i> | Quantitative and qualitative   |
| 9. <i>Responsible person(s)</i>     | EESC Faculty Instructor (TBD)  |
| 10. <i>Time (which semester(s))</i> | Spring 2027  |
| 11. <i>Ways of closing the loop</i> | Reports first to the Chair and then to the entire faculty for comment & discussion. An end-of-year meeting will be devoted to evaluating assessment results and "closing the loop."<br>Identified "areas for improvement" will be incorporated into modified/updated core courses for future majors. |

#### Year 3: 2027-28

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| 1. <i>Which PLO(s) to assess</i>   | PLO#3 Identify, describe and explain the environmental, social, cultural, economic and other key characteristics and dynamics in different geographic contexts.   |
| 2. <i>Is it aligned to an ILO?</i> | Yes   |
| 3. <i>If yes, list ILO.</i>        | Diversity   |
| 4. <i>Course name and number</i>   | EEES 499 Capstone Seminar in Earth, Environmental and Sustainability Sciences   |
| 5. <i>SLO from course</i>          | CLO#2. Synthesize and integrate information on aspects of physical sciences, law, policy, economics and social science, as applicable, in an assessment of the selected topic.<br>CLO#3. Demonstrate the ability to gather, evaluate and articulate earth, environmental and sustainability sciences information through advanced written and oral communication. |

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| 6. <i>Assessment activity</i>       | Data analysis and final project  |
| 7. <i>Assessment Instrument</i>     | Faculty rating of student achievement (outstanding, proficient, still developing) using department rubric  |
| 8. <i>How data will be reported</i> | Quantitative and qualitative   |
| 9. <i>Responsible person(s)</i>     | EESC Faculty Instructor (TBD)  |
| 10. <i>Time (which semester(s))</i> | Spring 2028  |
| 11. <i>Ways of closing the loop</i> | Reports first to the Chair and then to the entire faculty for comment & discussion. An end-of-year meeting will be devoted to evaluating assessment results and "closing the loop."<br>Identified "areas for improvement" will be incorporated into modified/updated core courses for future majors. |

#### Year 4: 2028-29

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| 1. <i>Which PLO(s) to assess</i>   | PLO#4 Demonstrate effective teamwork ability by contributing to successful execution of group projects in the classroom, GIS laboratory and/or in the field   |
| 2. <i>Is it aligned to an ILO?</i> | Yes   |
| 3. <i>If yes, list ILO.</i>        | Collaboration   |
| 4. <i>Course name and number</i>   | EEES 499 Capstone Seminar in Earth, Environmental and Sustainability Sciences   |
| 5. <i>SLO from course</i>          | CLO#2. Synthesize and integrate information on aspects of physical sciences, law, policy, economics and social science, as applicable, in an assessment of the selected topic.<br>CLO#3. Demonstrate the ability to gather, evaluate and articulate earth, environmental and sustainability sciences information through advanced written and oral communication. |

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| 6. <i>Assessment activity</i>       | Data analysis and final project  |
| 7. <i>Assessment Instrument</i>     | Faculty rating of student achievement (outstanding, proficient, still developing) using department rubric  |
| 8. <i>How data will be reported</i> | Quantitative and qualitative   |
| 9. <i>Responsible person(s)</i>     | EESC Faculty Instructor (TBD)  |
| 10. <i>Time (which semester(s))</i> | Spring 2029  |
| 11. <i>Ways of closing the loop</i> | Reports first to the Chair and then to the entire faculty for comment & discussion. An end-of-year meeting will be devoted to evaluating assessment results and "closing the loop."<br>Identified "areas for improvement" will be incorporated into modified/updated core courses for future majors. |

#### Year 5: 2029-30

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| 1. <i>Which PLO(s) to assess</i>   | PLO#5 Identify, describe and explain how local, regional and global environmental, human societal, and economic processes and their outcomes are related to sustainable development.  |
| 2. <i>Is it aligned to an ILO?</i> | Yes   |
| 3. <i>If yes, list ILO.</i>        | Thinking and Reasoning; Diversity; Sustainability   |
| 4. <i>Course name and number</i>   | EEES 499 Capstone Seminar in Earth, Environmental and Sustainability Sciences   |
| 5. <i>SLO from course</i>          | CLO#2. Synthesize and integrate information on aspects of physical sciences, law, policy, economics and social science, as applicable, in an assessment of the selected topic.<br>CLO#3. Demonstrate the ability to gather, evaluate and articulate earth, environmental and sustainability sciences information through advanced written and oral communication. |

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| 6. <i>Assessment activity</i>       | Data analysis and final project   |
| 7. <i>Assessment Instrument</i>     | Faculty rating of student achievement (outstanding, proficient, still developing) using department rubric   |
| 8. <i>How data will be reported</i> | Quantitative and qualitative  |
| 9. <i>Responsible person(s)</i>     | EESC Faculty Instructor (TBD)   |
| 10. <i>Time (which semester(s))</i> | Spring 2030   |
| 11. <i>Ways of closing the loop</i> | <p>Reports first to the Chair and then to the entire faculty for comment &amp; discussion. An end-of-year meeting will be devoted to evaluating assessment results and “closing the loop.”</p> <p>Identified “areas for improvement” will be incorporated into modified/updated core courses for future majors.</p> |