

**Course Evaluation Measures Menu**

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| **Course number:**  | GIS 101 |
| **Course title:** | Introduction to GIS |
| **Campus location(s):** | Georgetown, Stanton |
| **Effective semester:** | 2022-51 |

**Core Course Performance Objectives**

1. Identify spatial data and the major components of a GIS. (CCC 1, 5; PGC GIS 1, 3, 5)
2. Demonstrate georeferencing of spatial data, and explain the geographic variables involved. (CCC 1, 5, 6; PGC GIS 1, 2, 3, 5, 7)
3. Employ vector data structure to create geographic data. (CCC 1, 5, 6; PGC GIS 1, 3, 5, 7)
4. Identify and describe raster data models. (CCC 1, 5, 6; PGC, GIS 1, 3, 5, 7)
5. Employ fundamentals of data management and acquisition of new data. (CCC 1, 2, 5, 6; PGC GIS 1, 3, 5, 7, 8)
6. Illustrate GIS data input and manipulation. (CCC 1, 2, 5, 6; PGC GIS 1, 3, 5, 7)
7. Employ meaningful data display in the creation of maps. (CCC 1, 5; PGC GIS 1, 2, 3, 7)
8. Explain data exploration and manipulation in a GIS. (CCC 1, 5; PGC GIS 1, 3, 4, 7, 8)
9. Demonstrate professional and ethical conduct as expected in industry. (CCC 4; PGC GIS 7, 8)

**Summative Evaluations**

*Please note: All courses must have a* ***minimum******of four*** *summative evaluation measures, and those measures should include a variety of evaluation methods (e.g., test, oral presentation, group project).* ***Please list all summative evaluation measures. In addition to these summative measures, a variety of formative exercises/quizzes/other assignments should be used to guide instruction and learning* *but only required to be included on the final course grade.***

*For each measure, please include a scope of the assignment: for example, if requiring a research paper, include the range of required number of words and number and types of sources; for a test, include the types and number of questions; for a presentation, include the minimum and maximum time, and so on.*

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| **Evaluation Measures:** Include each agreed upon measure and scope of that measure (see above). | **Which CCPO(s) does this evaluation measure?**  |
| **Exams (Summative)**2-4 Exams (equally weighted)20-40 Multiple Choice and Problem-Based Questions generated from a pool* + Online or Paper based exams
	+ Only one attempt, no re-attempts allowed
	+ Open book/note
 | **1-9** |
| **Final Project Proposal (Summative)**Propose a problem-solving mapping project to include:* Question/Problem (Why analyze this? What story are you telling with this map?)
* Idea/Objective (What exactly do you hope to gain from this analysis? What message do you want to convey? How will the map be used?)
* Audience (Who will use this map? How familiar are users with the subject matter?)
* Technical limits (Where will the map be used? How will the map be delivered? What size will the map be?)
* Data Acquisition (What data would you need to support your map objective? Which datasets will serve as basemap layers? Which coordinate system supports the intended use of the map?)
* Symbology (Is the data qualitative or quantitative? What type of symbols best meet the map objective and audience? Are simple or complex symbols required? What type of text will you include on your map?)
* Above and Beyond parameter (Identify one thing you will do above the minimum requirements. This could include collecting your own data, using multiple analysis methods, multiple data frames, etc.)
* Plan of Attack (Detailed bulleted schedule of proposed workflow).
* References (APA Citations for cited literature or data sets)
 | **1-9** |
| **Final Project (Summative)**Design an ethical and appropriate map to answer a question/solve a problem. Deliverables will include a poster displaying the map and a written report explaining the map. The poster will clearly communicate the purpose of the map. It will be a single 24”x36” PDF with:* A minimum of 2 separate data frames.
* One data frame depicting the data to answer the question/solve the problem.
* One data frame as a key map.
* All appropriate and necessary annotation and map elements.
* Map elements arranged with appropriate balance and consideration of alignment.
* Appropriate symbology.

The written report will:* Identify and Define the question/problem
* Identify stakeholders/audience
* Identify any criteria or limitations of the problem, audience, and/or data.
* Explain the data you used and any challenges that arose in data collection
* Methods/queries used to select data.
* Coordinate system being used and why.
* Process followed to analyze the data
* Explain choice of classification method for symbology
* Identify Above and Beyond parameter

Include a screen-shot of the project geodatabase fully expanded. | **1-9** |
| **Final Project Presentation (Summative)**Each student shall present for a minimum of 5 minutes.* Identify and Define the question/problem
* Identify stakeholders/audience
* Identify any criteria or limitations of the problem, audience, and/or data.
* Explain the data you used and any challenges that arose in data collection
* Methods/queries used to select data.
* Coordinate system being used and why.
* Process followed to analyze the data
* Explain choice of classification method for symbology
* Identify Above and Beyond parameter
* Overall presentation should be clear and concise, and students will take questions from the audience of peers.

Students will prepare a visual presentation to accompany their oral description of the project. | **1-9** |

**FINAL COURSE GRADE**

(Calculated using the following weighted average)

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| **Evaluation Measure** | **Percentage of final grade** |
| Exams: 2-4 equally weighted (Summative) | 30% |
| Final Project Proposal (Summative) | 5% |
| Final Project (Summative) | 15% |
| Final Project Presentation (Summative) | 5% |
| GIS Labs: 10-15 equally weighted (Formative) | 35% |
| Assignments: Homework, Question Sets, In-Class Activities, Discussion Boards (Formative) | 10% |
| TOTAL | 100% |

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| **Submitted by (Collegewide Lead):** | Kymberlie J Kelly | **Date** | 06/01/2020 |
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| **[ ]  Approved by counterparts** | **Date** |  |
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| **[x]  Reviewed by Curriculum Committee** | **Date** | 7/21/20 |