CARTOGRAPHY AND GEOVISUALIZATION, CERTIFICATE

The visualization of spatial data through maps, infographics, and other forms of visual storytelling is a critical and effective avenue for communicating information in our interconnected world. Producing evocative maps and other cartographic products, however, requires familiarity with geospatial science and experience with creative design. Students enrolled in the **Cartography and Geovisualization Certificate** will acquire skills in the art and science of map production through the use and application of geographic information systems (GIS), industry standard illustration software, and online mapping platforms. This certificate is ideal for students who are interested map production and who wish to integrate a distinct and complementary set of valuable technical abilities with their primary area(s) of study.

The Cartography and Geovisualization Certificate is designed for students who:

- are interested in learning about the production of maps and their value in communicating visual and written stories.
- may seek employment in careers that are informed by or benefit from experience in map production and storytelling.
- desire to pursue a graduate degree in a discipline that is informed by or benefits from experience in map production and visual storytelling.

(Code 140-605)

Code	Title	Credits
12 Credits Required		
GEOG 280	Introduction to Cartography and Visualization	3
GEOG 335	Geographic Information Systems I	3
GEOG 337	Geographic Information Systems II	3
GEOG 339	Applied Cartography and Geovisualization	3
Note 1: Completion of GEOG 280 and GEOG 335 is recommended prior to enrollment in GEOG 339		
Note 2: Students cannot pursue the Geography Major and the Cartography and Geovisualization Certificate to meet graduation requirements for completing a first and second degree program. Courses taken for the certificate cannot be applied to the major program.		

Program Learning Outcomes

Students completing this program will be expected to meet the following learning outcomes:

- Demonstrate competency in the knowledge and application of the fundamentals of cartographic design.
- Demonstrate proficiency in the ethics of collection, use, and analysis of spatial data used in the production of cartographic visualizations.
- Demonstrate the ability to synthesize and map spatial data and create effective cartographic visualizations.