**GEODESIGN (GEODZ)**

GEODZ 511: Geodesign History, Theory, Principles

3 Credits

Students study the theory and principles of geospatially-based design by investigating the methods and collaborative nature of the geodesign process. GEODZ 511 Geodesign History, Theory, Principles (3) GEODZ 511 consists of lectures, readings in course literature, small group discussion forums, and individual topic investigation. In this course students will explore the questions, challenges, and the values of the geodesign framework. The course provides a comprehensive overview of the geodesign process, including designing in geographic space, issue identification, process evaluation, fast iteration and alterative scenario generation, multidisciplinary collaboration, and the role of science- and value-based decision making. The course culminates in a final project in which students independently research the physical and social characteristics, data, and teaming-expertise required to deploy a study for their topic, and report on how their proposed geodesign framework enables creative change for that location. Students who successfully complete the course will be able to associate different types of design and planning issues and challenges to the appropriate geodesign workflow and identify possible models to use to promote creative change for a place. They will be able to prepare a description of a scenario and the team needed to perform a geodesign study, and illustrate which tools or techniques may be best suited for a scenario.

**Prerequisite:** GEOG 482

GEODZ 596A: Individual Studies--Geodesign Capstone Project Proposal and Peer Review

3 Credits

Preparation and peer-review presentation of proposal for an individual capstone geodesign project.

**Prerequisite:** GEODZ852

GEODZ 596B: Individual Studies--Geodesign Capstone Project Dissemination

3 Credits

Preparation and dissemination of geodesign capstone project results in a formal professional venue.

**Prerequisite:** GEODZ596A

GEODZ 822: GeoDesign Models I: Evaluation and Decision

3 Credits

The principles, inherent values and practical applications of Evaluation and Decision models as implemented within the Geodesign Framework.

**Prerequisite:** GEODZ511

GEODZ 824: GeoDesign Models II: Process and Impact

3 Credits

The principles, inherent values and practical applications of Process and Impact models as implemented within the Geodesign Framework.

**Prerequisite:** GEODZ822

GEODZ 826: GeoDesign Models III: Representation and Change

3 Credits

The principles, inherent values and practical applications of Representation and Change models as implemented within the Geodesign Framework.

**Prerequisite:** GEODZ822

GEODZ 842: Geodesign Studio I: Rural/Regional Challenges

6 Credits

Problems-based workshop where students apply geodesign process, in a collaborative setting, to regional-scale landscape change and land planning topics.

**Prerequisite:** GEODZ824 or GEODZ826

GEODZ 852: Geodesign Studio II: Urban/District-scale Challenges

6 Credits

Problems-based workshop where students apply geodesign process, in a collaborative setting, to urban-scale landscape change and land planning topics.

**Prerequisite:** GEODZ842