South Central College

GIS 2844 GIS Internship

Course Outcome Summary

Course Information

Description This variable credit course is one of the capstones of the Geographic Information Systems certificate program, where upon the students are provided a real world working atmosphere with area partners, such as state, county, and local governments, and consulting agencies. Students in this course work on assignments as requested by the governing agency and will be directed by the course instructor. (Prerequisite: GIS 2841 or consent of the instructor)

Types of Instruction

Instruction Type	Credits/Hours
Internship	1-4/48-192

Pre/Corequisites

GIS 2841 Intermediate GIS or Consent of the instructor

Institutional Core Competencies

Civic Engagement and Social Responsibility - Students will be able to demonstrate the ability to engage in the social responsibilities expected of a community member.

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

Course Competencies

1. Describe the role of GIS in a workplace

Learning Objectives
Identify how GIS is used in various work departments
Determine scope of GIS project needs
Observe GIS workflow in an organization
Recognize the components of an organization with varying resources

2. Demonstrate proficiency loading and configuring GIS software and hardware

Learning Objectives
Determine software requirements for software loads
Identify issues with various operating systems
Research online sources for software loading issues

Configure computers for optimum performance

3. Demonstrate proficiency troubleshooting GIS software and hardware

Learning Objectives

Identify potential problems within a GIS
Locate reliable sources for acquiring information
Develop a log of issues resolved
Publish solutions to common issues

4. Demonstrate working knowledge of ArcGIS software

Learning Objectives

Identify the components of ArcGIS software
Configure ArcGIS components
Maintain ArcGIS components

5. Create open database connections (ODBC) to local computers

Learning Objectives

Research available GIS data locations
Determine security or rights issues
Configure ArcGIS ODBC connectivity
Test and maintain viable data connections

6. Demonstrate GIS project management

Learning Objectives

Identify project resources
Identify project costs
Identify project needs
Develop project workflow diagrams

7. Load and configure ArcGIS Server

Learning Objectives

Determine system requirements for ArcGIS Server load
Review ESRI licensing agreements
Examine ArcGIS Server components
Configure ArcGIS Server for use within an organization

8. Load and configure a License Manager

Learning Objectives

Detemine requirements of Flex LM
Configure networking between the licensing server and workstations
Restart a licensing service
Remotely restart a service

9. Determine roles of GIS Team members

Learning Objectives

Identify the roles of a GIS Supervisor
Identify roles of a GIS Specialist
Identify the roles of a GIS Technician
Identify the roles of GIS users

10. Recognize data privacy laws

Learning Objectives

Research current federal and state data privacy laws
Determine which data is considered private
Protect private data

11. Practice data integrity

Learning Objectives

Adhere to accuracy guidelines
Document changes to data
Provide acknowledgement to data owned by others
Review industry data practice guidelines

12. Practice industry data storage standards

Learning Objectives

Develop a database storage system
Assign and manage user rights
Develop metadata for data sets
Document data collection and manipulation information

13. Research data requirement needs

Learning Objectives

Research project requirements
Determine project requirements
Identify data needs
Verify data needs with end user

14. Establish safe work habits

Learning Objectives

Develop safe data collection practices
Identify potential field hazards
Identify safety equipment needed during data collection
Review industry safety standards

15. Identify end user requirements

Learning Objectives

Develop data for use in GIS
Develop data for use in CAD
Provide efficient accessibility to data
Research end user requirements

16. Practice delivery of end data

Learning Objectives

Determine project deliverables
Develop efficient work flow diagrams
Adhere to project time lines
Perform to highest quality of work standards

SCC Accessibility Statement

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Additional information and forms can be found at: www.southcentral.edu/disability

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