South Central College

GIS 2844 GIS Internship

Common Course Outline

Course Information

Description
This variable credit course is one of the capstones of the GIS 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 - Intermediate GIS or consent of the
Instructor)

Career Cluster
Engineering, Manufacturing & Technology

Total Credits 2-4
Total Hours 96-192

Types of Instruction

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<tr>
<th>Instruction Type</th>
<th>Credits/Hours</th>
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<td>Internship</td>
<td>2-4/96-192</td>
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Pre/Corequisites

Prerequisite GIS 2841 Intermediate GIS or Consent of the instructor

Institutional Core Competencies

1 Analysis and inquiry: Students will demonstrate an ability to analyze information from multiple sources
and to raise pertinent questions regarding that information.

2 Critical and creative thinking: Students will develop the disposition and skills to strategize, gather,
organize, create, refine, analyze, and evaluate the credibility of relevant information and 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 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
Determine 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**
If you have a disability and need accommodations to participate in the course activities, please contact your instructor as soon as possible. This information will be made available in an alternative format, such as Braille, large print, or cassette tape, upon request. If you wish to contact the college ADA Coordinator, call that office at 507-389-7222.

Disabilities page [http://southcentral.edu/academic-policies/disability-rights.html](http://southcentral.edu/academic-policies/disability-rights.html)