



## Syllabus

**Date Syllabus Filed:** \_\_\_\_\_

**Instructor:** Clint Offutt

**Office Hours:** TBA      **Office Phone:** (785) 738-9082

**Where to Leave Messages:** coffutt@ncktc.edu

**Course Number:** GIS 100    **Semester Credits:** 3

**Course Title:** Intro to GIS Architecture

**Building:** Telecommunications/ACIT

**Catalog Description:** This introductory course will give the student introduction to hardware and software components, applications and introduction to data structures and basic functions. The student will explore issues in operational and management issues. Hands on experience will be gained using a commercial GIS software package.

### **Required purchases (texts, supplies, etc.):**

Text Book: *GIS Tutorial Updated for ArcGIS 9.3* by Wilpen L. Gorr and Kristen S. Kurland: ESRI Press 2008 ISBN 978-1-58948-205-0  
ESRI Virtual Campus Training Course: *Learning ArcGIS Desktop*

**Reference Material:** Sommer, Shelly and Tasha Wade *A to Z GIS* 2006. Redlands, CA.

### **Method of Evaluation/Grades:**

Grades will be based on the following:

ESRI Training Module Exercises and Certifications:	25%
Tutorial Exercises/Class Participation:	50%
Quizzes and Exams:	25%

Grades will be based on the following scale:

100 – 90% = A

89 – 80% = B

79 – 70% = C

69 – 60% = D

59 – 0% = F

**Due Dates for Assignments:** Assignments are due at the beginning of the next class, unless otherwise stated.

**Date of Final Examination:** TBD

**Late Assignment Policy:** Late assignments *may* be accepted, though they will be subject to credit reduction.

**Attendance Policy:** Attendance is not mandatory, though students it is the student's responsibility to make up and/or retrieve any assignments or material presented in class. Students with poor attendance may miss material crucial to advancement in the course, so it is recommended that students limit their absences. The student's grade will also suffer from poor attendance because a large portion of your grade comes from class participation.

**Inclement Weather Policy:** Standard college policy.

### **Services for Students With Disabilities:**

Students, with either a permanent or temporary disability, who require accommodation for more than one week, should request services by contacting the Student Services Office. Students requesting accommodations must present written documentation from a certified professional, which should include a statement identifying the disability as well as recommendations for accommodations. Contact, at least one month in advance, the Dean of Student Services (785) 738-2276 to make requests for accommodations.

### **Policy Regarding Academic Dishonesty:**

Academic dishonesty of any kind will not be tolerated while attending North Central Kansas Technical College. The examples of academic dishonesty are plagiarism, cheating, falsification or forgery of any assignments or examinations. Any student who participates in any form of academic dishonesty must accept the consequences of their actions. These consequences may include but are not limited to the following (a) verbal or written warning, (b) lowering of grade for assignment/activity, (d) failure of class assignment or exam.

## Course Objectives:

The Environmental Systems and Research Institute (ESRI) is the industry leader in Geographic Information Systems software. Students will participate in online training modules created and hosted by ESRI. The online modules utilize the most current version of ESRI products providing students with an environment to develop their GIS skills using the most state-of-the-art geospatial software.

## Course Outline:

**GIS Tutorial Workbook for ArcView 9, Third Ed Text:** The book combines ArcGIS tutorials and self-study assignments that start with the basics and progress to more difficult functionality to meet the demand of industry.

**ESRI Training Courses:** Students will be required to complete one ESRI training course throughout the semester: *Learning ArcGIS Desktop*. Courses may be found at ESRI's training site: <http://training.esri.com/gateway/index.cfm>.

**ESRI Training Module Exercises:** Each of the ESRI online training courses is divided into ~3 hour modules. In each module, students will be required to complete the provided exercises (e.g. how to create a geodatabase). To ensure that content of each module is completed, students will be required to produce and turn in the results from that module (e.g. a simple geodatabase).

**ESRI Training Module Exams:** After the completion of a module students will take an exam that covers topics throughout the training session. To pass the module, students must achieve a grade of 80% or higher to progress to the next module. Once a student passes an exam, they are awarded a "Certificate of Completion" which they must print and submit to the instructor.

## Class Outline

### Intro to GIS Architecture

#### Class Outline

**Text:** *GIS Tutorial, Workbook for ArcView 9, Third Edition*

**ESRI Virtual Campus Course:** *Learning ArcGIS Desktop*

#### Introduction

**Class 1:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 1

**Class 2:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 1 Exercises

#### Map Design

**Class 3:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 2

**Class 4:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 2 Exercises

#### GIS Outputs

**Class 5:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 3

**Class 6:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 3 Exercises

Geodatabases

**Class 7:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 4

**Class 8:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 4 Exercises

Importing Spatial and Attribute Data

**Class 9:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 5

**Class 10:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 5 Exercises

Digitizing

**Class 11:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 6

**Class 12:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 6 Exercises

Geocoding

**Class 13:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 7

**Class 14:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 7 Exercises

Spatial Data Processing

**Class 15:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 8

**Class 16:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 8 Exercises

Spatial Analysis

**Class 17:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 9

**Class 18:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 9 Exercises

ArcGIS 3D Analyst

**Class 19:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 10

**Class 20:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 10 Exercises

Arc GIS Spatial Analyst

**Class 21:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 11

**Class 22:** *GIS Tutorial, Workbook for ArcView 9, Third Edition* Tutorial 11 Exercises

Getting Started with ArcGIS Desktop

**Class 23:** *Learning ArcGIS Desktop* Module 1

**Class 24:** *Learning ArcGIS Desktop* Module 1

Creating Map Symbolology

**Class 25:** *Learning ArcGIS Desktop* Module 2

**Class 26:** *Learning ArcGIS Desktop* Module 2

Referencing Data to Real Locations

**Class 27:** *Learning ArcGIS Desktop* Module 3

**Class 28:** *Learning ArcGIS Desktop* Module 3

Organizing Geographic Data

**Class 29:** *Learning ArcGIS Desktop* Module 4

**Class 30:** *Learning ArcGIS Desktop* Module 4

Creating and Editing Data

**Class 31:** *Learning ArcGIS Desktop* Module 5

**Class 32:** *Learning ArcGIS Desktop* Module 5

Getting Started with GIS Analysis

**Class 33:** *Learning ArcGIS Desktop* Module 6

**Class 34:** *Learning ArcGIS Desktop* Module 6

Working with Geoprocessing and Modeling Tools

**Class 35:** *Learning ArcGIS Desktop* Module 7

**Class 36:** *Learning ArcGIS Desktop* Module 7

Designing Maps with ArcGIS

**Class 37:** *Learning ArcGIS Desktop* Module 8

**Class 38:** *Learning ArcGIS Desktop* Module 8

**Class 39:** If Necessary

**Class 40:** If Necessary