BUTTE COLLEGE
COURSE OUTLINE

I. <u>CATALOG DESCRIPTION</u>

GEOG 100 - Review for ESRI Certification   **1 Unit(s)**

Prerequisite(s): NONE

Recommended Prep: GEOG 20 GEOG 21 GEOG 22 or equivalent training

Transfer Status: NT

51 hours Lab

This course is a comprehensive review of the Geographical Information Skills (GIS) and knowledge measured in the ArcGIS Desktop Associate certification exam. Using ESRI's study guide will provide a thorough appraisal of the information needed to be a successful examination candidate. This will include overviews of essential ArcGIS for Desktop tools and workflows to strengthen your skills. The Certification Study Guide will provide step-by-step exercises to reinforce what you've learned, followed by actual exam questions to test your knowledge. Successful completion of this course does not guarantee that you will pass the ESRI ArcGIS Desktop Associate Certification exam. Students should have 2 years of experience using GIS prior to taking the exam.

II. <u>OBJECTIVES</u>

Upon successful completion of this course, the student will be able to:
A. Create and modify geospatial data.
B. Manipulate local and online content using ArcGIS Mobile and ArcGIS Online mapping.
C. Perform geoprocessing tasks.
D. Create ArcGIS custom mapping tools, such as custom map layouts, custom commands using Python, and use add-ins such as XTools Pro.
E. Create and deploy ArcGIS Runtime and ArcGIS Engine applications.

III. <u>COURSE CONTENT</u>

A. **Unit Titles/Suggested Time Schedule**

Lab

Topics	Hours
1. Applying ArcGIS Concepts	10.00
2. Working with Data	11.00
3. Applying Geoprocessing Techniques	10.00
4. Working with Mapping and Visualization Tools	10.00
5. Apply processes using ArcGIS Model Builder	10.00
Total Hours	51.00

IV. <u>METHODS OF INSTRUCTION</u>

A. Instructor Demonstrations
B. Discussion
C. Reading Assignments

V. <u>METHODS OF EVALUATION</u>

A. Exams/Tests
B. Quizzes

C. Projects

VI. **EXAMPLES OF ASSIGNMENTS**
    A. Reading Assignments
        1. Read the ArcGIS for Desktop Extensions chapter and prepare to answer and discuss in class the Challenge questions.
        2. Read the Editing Attributes chapter and prepare to answer and discuss in class the Challenge questions.
    B. Writing Assignments
        1. Create an annotated bibliography of a specific field of study (student's major) consisting of at least 20 peer review articles. 500 word minimum.
        2. Investigate the use of open-source GIS software and conventional GIS software. Focus on use by private enterprise, government (all levels), non-profits, and individuals. 750 word minimum.
    C. Out-of-Class Assignments
        1. Not applicable.

VII. **RECOMMENDED MATERIALS OF INSTRUCTION**
    Textbooks:
    A. Schmidts, Miriam. Esri ArcGIS Desktop Associate Certification Study Guide. 1st Edition. ESRI Press, 2013.

Created/Revised by: Randy Cousineau
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