Fond du Lac Tribal and Community College
COURSE OUTLINE FORM

Updated 9/23/14

Please return this form to the college vice president of academic affairs and the chairperson of the Academic Affairs and Standards Council (AASC)

1. Prepared by: __________________________________________________
2. Date submitted: ____________________________________________
3. Date approved: Date revised: 3/25/2015
4. Department/discipline: Geography
5. Department(s) endorsement(s): ________________________________
   (Signatures of the person(s) providing the endorsement are required.)
6. Course Title: Geographic Information Systems II
   Abbreviated course title (25 characters or less):
7. Course Designator: GEOG
8. Course Level: 2050
9. Number of Credits: Lecture: 2_ Lab: 2
10. Control Number (on site): 24 Control Number (online): 0
11. Catalog/Course description:
    Comprehensive consideration is given to a real-world geospatial project, either aligning with an external partner or suitable to the student’s field of interest. Topics include data and file management, project management, advanced GIS analysis techniques, and developing and presenting products that convey project results.
12. Course prerequisite(s) or co-requisite(s):
   Prerequisite(s): GEOG 2020 Geographic Information Systems I and GEOG 2025 Cartography and Visualizations or consent of instructor
   Co-requisite: None
13. Course Materials (Recommended course materials and resources. List all that apply, e.g. textbooks, workbooks, study guides, lab manuals, videos, guest lecturers).
   1. Text: Determined on a yearly basis depending on availability and content
2. Additional resources:
   a. GIS Lab (Room 208) with Esri’s ArcGIS and Adobe Illustrator software installed on networked PCs
   b. Plotter for poster printing
   c. Handheld GPS receivers and associated accessories
   d. One-year Student Licenses for Esri’s ArcGIS Desktop (Windows based)
   e. Esri Virtual Campus Courses
   f. Supplemental articles, videos, and case studies

14. **Course Content** (Provide an outline of major topics covered in course)

   - GIS Project Management
     - Identify spatial problem
     - Data needs and sources
     - File/folder structure
     - Analysis of data (GIS operations/functions)
     - Results (maps, charts, tables, pictures, graphics)
     - Metadata (created for all new data)
     - Conclusion (student presentation to class/stakeholder)

15. **Learning Goals, Outcomes, and Assessment**

    At FDLTCC we have 4 Competencies Across the Curriculum (CAC) areas. They are as follows:

    A. Information Literacy (the ability to use print and/or non-print tools effectively for the discovery, acquisition, and evaluation of information)

    B. Ability to Communicate (the ability to listen, read, comprehend, and/or deliver information in a variety of formats.)

    C. Problem Solving (the ability to conceptualize, apply, analyze, synthesize, and/or evaluate information to formulate and solve problems.)

    D. Culture (knowledge of Anishinaabe traditions and culture, knowledge of one’s own traditions and culture, knowledge of others’ traditions and cultures, culture of work, culture of academic disciplines and/or respect for global diversity.)

    *Course learning outcomes will fulfill the identified competencies:*

    **Course Learning Outcomes:**
Upon completion of this course, students will be able to:

1. Develop a current résumé tailored to their field of study (B,C)
2. Identify the needs of a project to include datasets, data sources, and time commitment (A,B,C)
3. Appraise potential ethical and/or cultural issues associated with geospatial data/analysis for the project (A,B,D)
4. Find and download data, disseminate and incorporate external datasets for a project (A,B,C)
5. Create, edit and manage geospatial data (A,B,C)
6. Customize the ArcGIS interface using programming (C)

16. Minnesota Transfer Curriculum (MnTC): If this course fulfills an MnTC goal area, state the goal area and list the goals and outcomes below:

See www.mntransfer.org

Goal Area(s): N/A

Goal and Outcomes:
  Goal: N/A
  Outcome:
Complete the following only if you are proposing a new course:

1. Planned pattern of offering:
2. Rationale for course: If this course is an ADDITION or replacement to current offerings, add a detailed explanation of the necessity for the change.
3. Does this course overlap with any course(s) offered at FDLTCC? If so, justify such duplication or indicate other adjustments to be made. Obtain signatures from affected departments.
4. What is the apparent or expressed student need for this course?
5. If this course includes a Native American or specifically Anishinaabe component list campus resource person/s—i.e., campus cultural/spiritual resource person/s and, if necessary, elder/s—consulted and include specific comments and written responses as appropriate.
6. Are there any additional licensing/certification requirements involved?
   a. Provide a copy of the required licensing/certification standards to the AASC chair and to the vice president of academic affairs.
   b. Attach the required documentation to show course meets required licensing/certification standards.
7. What types of tutoring will be made available through the CAA to students taking this course?
8. How will the course be evaluated?
9. Special resources—e.g. faculty, space, equipment, library, etc
10. Special course fees:
11. Relationship of course to the college mission statement and goals.
12. Relationship of course to the department’s mission statement and goals.
13. Relationship of course to colleges/university offerings (include tribal colleges).

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<th>General Education</th>
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