Fond du Lac Tribal and Community College  
COURSE OUTLINE FORM  

Updated 11/25/14

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 __03/25/15__

4. Department/discipline: __Geography/Physical Education__

5. Department(s) endorsement(s): ________________________________

(Signatures of the person(s) providing the endorsement are required.)

6. Course Title: __Using GPS: Geocaching and Field Mapping__

Abbreviated course title (25 characters or less): ________________________________

7. Course Designator: __GEOG/PE__  8. Course Level: 1054

9. Number of Credits: Lecture ________Lab ________ (Repeatable)______

10. Control Number (on site) ________Control Number (online)________

11. Catalog/Course description:

   Curious about how to use a GPS unit? This course will inform students about the Global Positioning System (GPS) through both conceptual and hands-on applications, such as geocaching and field data collection. GIS software and associated applications will also be introduced.

12. Course prerequisite(s) or co-requisite(s): Accuplacer scores/ Other courses

    Prerequisite(s): ________________________________

    Co-requisite: ________________________________

13. Course Materials (Recommended course materials and resources. List all that apply, e.g. textbooks, workbooks, study guides, lab manuals, videos, guest lecturers).

    Text: Determined on a yearly basis depending on availability and content

    Additional resources:
    Handheld GPS receivers and associated accessories
    GIS Lab (Room 208) with Esri’s ArcGIS software installed on networked PCs
    Outdoor activities locally
    Supplemental resources

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

    GPS Concepts – Satellites and the DoD
    GPS Positioning Modes
    Differential Corrections – Accuracy
    Selective Availability – Accuracy
    Pros and Cons of GPS
    Datums, Coordinate Systems, and Map Projections
Who uses GPS and what are they using it for? (GPS Application)
Hands-on operation of a GPS receiver
Integrate position data collected with a GPS unit with GIS software
Responsible geocaching

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, the student will be able to:

1. Describe the global positioning system and how it works (A, B)
2. Identify the differences between recreational-grade and map-grade GPS receivers (A)
3. Identify applications of GPS (A, B, C)
4. Operate a GPS receiver to locate a geocache (A, C)
5. Perform responsible geocaching (C, D)
6. Collect data from the field (A, C)
7. Apply programming to complete an activity (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):________