I. TITLE: Plane Surveying

II. CATALOG DESCRIPTION:
Field and office procedures necessary for measuring distances, elevations, horizontal and vertical angles. Topographic mapping, boundary and area calculations, and basic construction applications of survey procedures. Care and use of survey instruments. Two hours lecture and three hours lab.

III. PURPOSE:
Students will learn basic principles of plane surveying and application of measurement to mapping, land ownership, and construction.

IV. COURSE OBJECTIVES:
Students will (1) perform basic survey measurements of distance, direction, area, and volume (2) determine accuracy and precision of measurement, (3) prepare survey drawings and plats, and (4) perform typical surveying computations.

V. CONTENT OUTLINE:
A. Deeds and land ownership
B. Distance measurement
C. Measurement of elevation
D. Determination of direction
E. Large scale mapping
F. Computations of precision, area, and plane coordinates

VI. INSTRUCTIONAL ACTIVITIES:
A. Lecture
B. Field Exercises in plane surveying
C. Computer-based data reduction and mapping

VII. FIELD, CLINICAL, AND/OR LABORATORY EXPERIENCES:
A. Field exercises
B. Visits to survey offices
C. Attendance at surveyors’ professional meetings

VIII. RESOURCES:
A. Computerized survey equipment owned by MSU will be used for field data collection.
B. Mapping and data reduction will be done using departmental computer facilities
IX. **GRADING PROCEDURES:**
A. Lab  20%  (not accepted if incorrect)
B. Homework 15%  (not accepted late)
C. Exams 3@ 15% = 45%
D. Final 20%  (comprehensive)

X. **ATTENDANCE POLICY:**
In accordance with university attendance policy, regular attendance in class is expected. Students will be required to makeup lab work missed during an excused absence. Because your attendance in lab affects the grades of other students, **you will be asked to withdraw from the class if you have more than one unexcused absence from lab.**

XI. **ACADEMIC HONESTY POLICY:**
Cheating, plagiarism (submitting another person’s material as one’s own), or doing work for another person which will receive academic credit are all impermissible. This includes the use of unauthorized books, notebooks or other sources in order to secure or give help during an examination; the unauthorized copying of examinations, assignments, reports or term papers; or the presentation of unacknowledged material as if it were the student’s own work. Disciplinary action may be taken beyond the academic discipline administered by the faculty member who teaches the course in which the cheating took place.

XII. **TEXT AND REFERENCES:**
B. Field notebook and 4H pencil

XIII. **PREREQUISITIES:** MAT 130 and ITD 107

XIV. **NODISCRIMINATION STATEMENT:** Murray State University does not discriminate on grounds of race, color, gender, sexual orientation, religion, national origin, age, disability, or veteran’s status in providing any educational or other benefits services of Murray State University to students or those applying for admission at Murray State University. Murray State University attempts to provide equal opportunity in all areas of student admissions, financial aid, employment, and placement and provides upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities an equal opportunity to participate in all programs and activities.

A. Kellie, 1/09
CET 280   Plane Surveying
Professor A.C. Kellie        237 Collins   762-6982       Spring, 2011
and y.kellie@murraystate.edu

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<thead>
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<td>Control Survey with GPS</td>
<td>GPS I/Station Descriptions</td>
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<td>GPS Coordinate Inverse</td>
<td>GPS I/Station Descriptions</td>
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<td>Traversing/Review⁴</td>
<td>Horizontal/Vertical Control</td>
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<td>3/29</td>
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<td>Site Plan—Field Survey</td>
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<td>Map III</td>
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<td>Exam III/Land Systems</td>
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<td>Inaccessible Point Problem</td>
<td>Inaccessible Point Problem</td>
<td>Ch 28</td>
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<td>5/3</td>
<td>Inaccessible Point Problem</td>
<td>Review</td>
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**Final Exam is 8:00 AM, Thursday, May 12, 2010 in Room 237 Collins. The exam will be comprehensive. All students will sit for examination.**

**Note:**
1. Homework will be assigned in lecture. It will be due at the **beginning** of the next lecture. Your homework **WILL NOT** be accepted if you are not on time for lecture.
2. Field books are due at the **beginning** of lecture following the lab in which the field work is done. Be sure that your field book has been initialied before you leave the field.
3. **NO** “extra credit” work is assigned in this course.
4. Bring text and highlighter to class for review session.