COURSE SYLLABUS
LS 3130 – Public Land Surveys

Instructor Information:
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Course Information:
Delivered and scheduled through the Outreach Credit Program

Prerequisites:
(LS 2000 or LS 2010) and LS 2100

Course Description:
This course covers the history, development, and execution of the US Public Land Survey System (PLSS) including restoration of lost and obliterated corners and retracement methods, and the subdivision of all types of sections. Topics include an introduction to non-rectangular entities and controlling intermediate corners and their intricate symbiotic relationships with the PLSS itself. Special emphasis is given in retracement functions and record interpretation to fulfill requirements of US Supreme Court rulings. A newly developed comprehensive look at evidence analysis is now included, explaining complex evidence arrangements, lost-obliterated-existent corner differences, and possible solutions to confusing or damaged evidence.

Disability Statement:
If you have a physical, learning, sensory or psychological disability and require accommodations, please let me know as soon as possible. You will need to register with, and provide documentation of your disability to University Disability Support Services (UDSS) in SEO, room 330 Knight Hall.

Objectives/Outcomes/Standards:
1. Recite the basic history of the Public Land Survey in the U.S.
2. Explain the dominant methods of measurement used, both for direction and distance.
3. Outline the rectangular system starting with an initial point through platting.
4. Identify methodology of original GLO/BLM markings along lines and at corners and accessories.
5. Classify corners today as either: existent, obliterated, or lost; and their changes in the 2009 Manual.
7. Restore lost corners by all eight methods of proportionate measurement.
8. Read GLO/BLM field notes to reconstruct the order of survey.
9. List the steps taken in drafting a township plat, including area computation and development of parenthetical distances. (Protect the plat concept)
10. List the requirements of original surveys, resurveys, surveys of patented mineral surveys, and special surveys.
11. Research today's records of original GLO surveys, and reconstruct the footsteps of the original deputy surveyor and "pen steps" of the plat drafter, and explore US Supreme Court guidance on this subject.
12. Introduce and utilize the BLM Glossary of Surveying terms (handout provided) for use in modern retracement work and platting.
Text(s) and Readings:

*BLM Glossary of Surveying Terms*, provided as a handout, USDI BLM, 1986.

Course Requirements/Assignments:
This course will consist of 9 exercises, a mid-term exam and a final proctored exam
Grading Standards:
Nine exercises at 5% = 45%, Mid-Term Exam = 25%, and a Final proctored Exam = 30%
A = 100% - 90%, B = 89% - 80%, C = 79% - 70%, D = 69% - 60%, F >60%

Attendance/Participation Policy:
University sponsored absences are cleared through the Office of Student Life.
Students are expected to attend every teleconference.

Academic Honesty:
UW Regulation 6-802. (Suggested language: The University of Wyoming is built upon a strong foundation of integrity, respect and trust. All members of the university community have a responsibility to be honest and the right to expect honesty from others. Any form of academic dishonesty is unacceptable to our community and will not be tolerated [from the University Catalog]. Teachers and students should report suspected violations of standards of academic honesty to the instructor, department head, or dean. Other University regulations can be found at: http://www.uwyo.edu/generalcounsel/new-regulatory-structure/index.html)

Course Outline:
I. The History and Background of the USPLS (Text Ch 1)
   A. Public lands
   B. Organization
   C. The Manual

II. Methods of Survey Measurement
   A. Distance
   B. Direction
   C. Astronomy
   D. Effect of geodesy – curved parallels, convergence of meridians
   E. Use of coordinates

III. Rectangular Survey System
   A. Initial points
   B. Principal Meridian
   C. Base line
   D. Quadrangles, standard parallels and guide meridians
   E. Townships
   F. Sections, regular sections, closing sections, fractional sections, three mile method, elongated
   G. Subdivision of sections, protraction, government lots,
   H. Fractional townships, meandering
   I. Marking lines between corners

IV. Corner Monumentation
   A. Corner materials
   B. System of marking
   C. Marking corner accessories

V. Restoration of Lost or Obliterated Corners
   A. Existent corners
B. Obliterated corners
C. Lost corners, single and double proportionate measurement
D. Indexing

VI. Resurveys
   A. Dependent vs. independent resurveys
   B. Bona fide rights

VII. Special Surveys
   A. Water boundaries
   B. Apportionment of lakes and rivers
   C. Navigability
   D. Changing nature of riparian law

VIII. Notes and Plats
   A. Notes and abbreviations
   B. Plat drafting methods
   C. Area computation

IX. Mineral Surveys
   A. Purpose
   B. Process
   C. Resurvey issues

The instructor may make changes to the syllabus as the course proceeds. If necessary, these changes will be announced in class. Substantive changes made to the syllabus shall be communicated in writing to the students.