

UNIVERSITY OF FLORIDA SCHOOL OF FOREST RESOURCES AND CONSERVATION
GEOMATICS PROGRAM - SUR 4430 SURVEYING AND MAPPING PRACTICE
SYLLABUS – SPRING SEMESTER 2017

COURSE TITLE: SUR 4430 Surveying and Mapping Practice - Credits: 3

PREREQUISITES: SUR 3520 and SUR 4403 or the equivalents. This course should be the final course in the Geomatics Certificate program for working professionals who have completed a 4 year degree in associated disciplines and wish to obtain a professional license in the Geomatics arena.

UF CATALOG DESCRIPTION: A study of land surveying and mapping practice; the lot survey; the sectional survey; the water boundary survey. Also includes office and business practices and professional standing.

Instructor's Expanded Description: A study of the Professional Practice of Surveying and Mapping, and to prepare the student to be accepted for the professional licensing exam in their associated discipline. The course will include the "Lot and Block" Boundary Survey; the United States Public Lands Survey System and Boundary surveys within sectionalized lands; Riparian Boundary Surveys (Mean High Water and the Ordinary High Water Mark); Public- And Private-Sector Office and Business Practices; Professionalism; Ethics; the Regulatory Environment; and the Professional Standing in the ever advancing environment of the Geomatics Profession.

COURSE COMMUNICATION: This is an online course only. Class location and time will be online through Canvas. Students are expected to read before lectures and contribute to discussion forum posts on a regular basis.

INSTRUCTOR: Robin B. Petzold, P.S.M.
2910 Maquire Road, Suite 2008, Ocoee, FL 34761
Contact via Email: robin.petzold@wantmangroup.com or cellphone 561.719.8276
Office hours: **Let's identify this together?**

TEXTBOOK: Required Text: *Evidence and Procedures for Boundary Location*
Sixth Edition, Robillard, Wilson, Brown
Note : Prerequisite courses required *Boundary Control and Legal Principles*, Brown, Robillard, Wilson, and this text will be an additional reference.
Supplementary Materials, Exhibits and Handouts will be distributed for lectures and labs. CADD-equipped and internet-accessible workstation/laptop is required. Due to this course being "online and email based"

OBJECTIVES: As one of the final courses of the Geomatics Certificate Program, this course will explore and discusses the practical applications of geomatics principles and theories, along with the understanding of business, accounting, and management principles to develop a complete understanding of the Surveying and Mapping Profession. Further, this course aligns with the students' professional goals of licensure as a Professional Surveyor and Mapper.

LECTURES:

Typically, Lectures will be posted weekly. Students will be responsible for watching the PowerPoint lecture and responding to the appropriate quizzes and assignments as applicable. Pay close attention to the weekly schedule.

ATTENDANCE: This course will deal in practical applications and will require student interaction through the discussion groups. Participation is a significant portion of your grade. Since this course is through Canvas, students are expected to read and respond to assignments before lectures and contribute to discussion forum posts on a regular basis. I can also be reached through the contact information above.

ASSIGNMENTS, DELIVERABLES AND DEADLINES: Welcome to the Profession! Deadlines are absolute (a 3:00pm deliverable is marked LATE at 3:01pm). Due dates and times will be announced when assignments are given. Strict attention to deadlines is required, just as it will be in your future practice of Surveying and Mapping. *Makeup tests* are given only if there is solid evidence of a medical or serious emergency in accordance with University policy.

All assignments must be successfully and fully completed and turned in to pass the course. Again, to pass this class, ALL work must be successfully and thoroughly completed and turned in. Late work delivered within 24 hours of the deadline will result in a 20% score reduction on delivery. Work delivered any later than 24 hours will be docked an additional 10%. All work must be turned in to pass this course, but any submittals over one week late will receive a score of zero. Incomplete submittals will be returned, and regardless of score, all assignments MUST be thoroughly and satisfactorily completed to pass this course.

ACCOMODATIONS FOR STUDENTS WITH DISABILITIES: Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

SPECIAL COURSE REQUIREMENTS- Students must check their official UF email accounts and the official course web page (Canvas) on a daily basis for announcements and other correspondence.

ETIQUETTE POLICY- All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. In the professional world, all electronic correspondence with any public agency is subject to the "Florida Sunshine Law" Never email anything you might regret!

ASSESSMENT METHODS: Current UF grading policies for assigning grade points may be reviewed at <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>. Grading will be weighted approximately as follows:

<i>Class Attendance and Participation/Discussions</i>	20% ~ 30%
<i>Homework/Quiz assignments</i>	30% ~ 40%
<i>Examinations/Final Exam (weight varies, for example, Final is weighted more than exams)</i>	40%

2017 COURSE TOPICS AND TENTATIVE CLASS SCHEDULES

The dates of each lesson may change during the semester, depending on our class progress. This is the initial plan to serve as a guideline. Lab assignments and quizzes will be assigned during lectures

LECTURE SERIES 1 – Introduction To The Practice Of Surveying and Mapping

Lecture 1 – 1/4 The Surveying and Mapping Profession - Course Outline. Introductions / Expectations (History)

LAB DISCUSSION SESSION 1 - 1/5 HOMEWORK ASSIGNED : NIRTS (WELCOME TO THE PROFESSION!)

Lecture 2 - 1/10 Time, Cost and Schedule Management)

Lab Quiz 1- 1/11 Evidence and Procedures Book (Preface and Chapter 1 Quiz)

Lecture 3 - 1/12 Client/Project and Business/Operational Proposals

LAB DISCUSSION SESSION 2 - 1/17 – LASER SCANNER/TERRESTRIAL LIDAR BUSINESS PROPOSAL INSTRUCTIONS AND OVERVIEW

* ASSIGNMENT DUE TODAY– FIELD CREW WORK ORDER PACKAGE ALONG WITH COST ESTIMATE AND LEGAL DESCRIPTION (HOMEWORK 1)

LECTURE SERIES 2 – A Highly Regulated Profession

Lab Assignment 2 – 1/18 Continue on Lab Assignment 2 (LASER SCANNER/TERRESTRIAL LIDAR BUSINESS PROPOSAL)

Lecture 4 - 1/24 Florida Statutes Chapter 472 and Florida Administrative Code Chapter 5J17

Lecture 5 - 1/26 Florida Statutes Chapter 472 and Florida Administrative Code Chapter 5J17 Continued to completion

* ASSIGNMENT DUE TODAY– LIDAR BUSINESS PROPOSAL (LAB 2)

Lecture 6 – 1/31 Florida Statutes Chapter 177 and the BLM Manual of Instructions

LAB DISCUSSION SESSION 3 - 2/1 – JACK FROST’S SURVEY – WRITING A SURVEYOR’S REPORT

Lab Assignment- Read FS Chapter 95 and 718 along with ALTA/ACSM Standards

Lecture 7 - 2/7 Florida Statutes Chapters 95 and 718 and the ALTA/ACSM Standards

Lecture 8- 2/9- National Council of Examiners for Engineering and Surveying (NCEES) Model Law and Model Rules

Quiz 2 – 2/8 – Regulatory Issues

LECTURE SERIES 3 - Surveying and Mapping Procedures and Deliverables

Lecture 9 – 2/14 – Surveying in a Monumented Subdivision

Lecture 10 – 2/16 – Surveying in a Protracted Subdivision – and- Surveyor’s Report and Content of A Survey Drawing

Lecture 11 & 12 – 2/21-23 Evidence and Procedures (Parts I & II)

Lecture 12 – 2/28 – The “Mortgage Survey” and Condominiums

Lecture 13 – 3/2 – The Bureau of Land Management and the History of the Public Lands Survey System (USPLSS)

SPRING BREAK, NO CLASSES FROM 3 /4 THROUGH 3 /11*

Lecture 14 – 3/14 – USPLSS Following in the footsteps, equipment and marks

Lecture 15 – 3/16– USPLSS Section Breakdown and the Center of Section

Lecture 16 & 17– 3/21-3/23 – Water Boundaries and the Ordinary High Water Mark

Lecture 18 & 19 – 3/28 – 3/30 – Tidal Boundaries and Mean High Water Surveys

Lecture 20 - 4/4 – Ethics Part I

Lecture 21 - 4/6 – Ethics Part II

Lecture 22 – 4/11 – Ethics Conclusions and Lab Assignment

Lecture 23 – 4/12 – Professionalism in Surveying and Mapping

Lecture 24 – 4/13- Professional Liability and Contracts

Last Lecture 25 – 4/18- Surveying and Mapping from A to Z

READING DAYS APRIL 20 and 21

FINAL EXAMINATION: TBD