

SUR 212 – Digital Drafting Spring 2019

A. COURSE INFORMATION

Course number/section: SUR 201.001
Class meeting time: Lecture: Online Only
Class location: Lecture: Online Only
Course Website:

B. INSTRUCTOR INFORMATION

Instructor: C.A. “Tony” Nettleman, III
Office location: Online Only
Office hours: TBA
Telephone: TBA
E-mail: TBA
Appointments: TBA or by appointment

Please be aware that e-mails are typically returned within 24 hours and I will be traveling throughout the semester (dates will be posted shortly before each trip). For immediate assistance, please call my cell phone.

C. COURSE CATALOG DESCRIPTION

An introduction to graphic and drafting principles and practices in surveying and mapping science. This course includes the development of the basic drafting skills needed to produce surveying plats and graphical presentations. The elements of descriptive geometry are addressed. A major component of the course is an introduction to the fundamentals of computer-aided drafting and design (CADD).

D. PREREQUISITES AND COREQUISITES

Prerequisites

None

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)

Mastering AutoCAD (newest edition).

Supplies

- Drafting tools: graph paper, protractor, ruler, pencil, eraser, etc.
- Free Software: AutoCAD, Civil3D, Sketchup and Revvit

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

By the end of this course, students should be able to:

1. Explain basic surveying terminology and develop proficiency in reading survey descriptions and plats.
2. Interpret survey descriptions and reproduce them in a graphical environment.
3. Perform coordinate geometry and basic trigonometry.
4. Proficiency in working within computer aided drafting and design.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

This course is composed of fifteen weekly modules. Each module includes lectures, assignments, and assessments created to gauge your understanding of the material.

Weekly modules are launched each Sunday at 12:01AM. The student is expected to watch the lectures and complete their work before the next Saturday at 11:59PM. Projects may run longer than one week so check your calendar for details.

H. MAJOR COURSE REQUIREMENTS AND GRADING

Student learning outcomes will be assessed through the following assignments and assessments:

| ACTIVITY | % of FINAL GRADE |
|-----------------------------|-------------------------|
| Attendance (bonus) | 10 |
| Labs (8 @ 60 pts) | 50 |
| Capstone Projects (4 @ 100) | 40 |

I. COURSE CONTENT/SCHEDULE

| WEEK | <u>TOPIC</u> | CHAPTER(S) |
|-------------|--------------------------------------|-----------------------------|
| 1 | Welcome and Basic Skills | None |
| 2 | Visualization Exercises | Handout (Drafting CH 1) |
| 3 | Visualization Exercises Contd. | Handout (Drafting CH 2) |
| 4 | Intro to AutoCAD | CH 1 |
| 5 | Drawing Aids and Editing Entities | CH 9 |
| 6 | Civil 3D Introduction | Handout (Civil3D CH 1) |
| 7 | Legal Descriptions w/ Carlson Survey | TBA |
| 8 | Topographic Mapping w/ Civil3D | Handout (Civil3D CH 4) |
| 9 | Spring Break | N/A |
| 10 | Intro to Subdivisions | Handout (Dallas Ordinances) |
| 11 | Subdivisions w/ Carlson Survey | N/A |
| 12 | REVIT (Introduction) | Handout (Revit CH 1) |
| 13 | REVIT (Modeling) | Handout (Revit CH 2) |
| 14 | REVIT (Structures and Ceilings) | Handout (Revit CH 9) |
| 15 | Final Project Working Week | N/A |

Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

J. COURSE POLICIES

Attendance/Tardiness

Attendance at all times is compulsory

Late Work

Late work will not be graded.

Participation

Participation in all activities is compulsory.

K. COLLEGE AND UNIVERSITY POLICIES

Academic Integrity (University)

It is expected that university students will demonstrate a high level of maturity, self-direction, and ability to manage their own affairs. Students are viewed as individuals who possess the qualities of worth, dignity, and the capacity for self-direction in personal behavior. See the full University Policy at landsurveycareer.com/catalog

Deadline for Dropping a Course with a Grade of W (University)

The grade of W will be assigned to any student officially dropping a course. Please consult with the instructor before you decide to drop to be sure it is the best thing to do. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Should dropping the course be the best course of action, visit the Office of the University Registrar for the Course Drop Form that must be submitted. No student is eligible to receive a W without completing the official drop process by this deadline. Please consult the Academic Calendar (landsurveycareer.com/calendar) for the last day to drop a course

Grade Appeals (College of Science and Engineering)

A student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor.

Disability Services

Our services are designed to meet the unique educational needs of enrolled students with documented permanent or temporary disabilities. DS provides intake and consultation services to students seeking to register with our office. DS reviews an individual's documentation of disability and assesses eligibility for services and the determination of reasonable accommodations. For more information visit the Disability Services Office landsurveycareer.com/disability

GENERAL DISCLAIMER

I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.