

Department of Engineering Technology

CNET 2300 - Construction Graphics and Modeling

3 hours (1, 4)

Section 002/201 – Fall 2018 Syllabus

Meeting Times: Thu.: 8:30 a.m. – 9:20 a.m. (002)

Thu: 10:00 a.m. – 1:50 p.m. (201)

Meeting Room: NTDP F119 (002/201)

| INSTRUCTOR Aloysius (Al) Attah, P.E. | EVALUATION | |
|--|-----------------------|------------|
| OFFICE NTDP F115G | | |
| PHONE 940)-565-2022 | Lab Exercises | 50% |
| E-MAIL <u>aloysius.attah@unt.edu</u> | Midterm Exam | 15% |
| , | Final Exam | 15% |
| Office Hours | Final Project | <u>20%</u> |
| Mon: 1:30 p.m. – 03:00 p.m. | TOTAL | 100% |
| Wed/Fri: 9:30 a.m. – 11:00 a.m. | | |
| Thu: 9:30 a.m. – 10:00 a.m. | <u>Final Grade</u> | |
| Or | 90-100 = A | |
| By appointment | 80-89 = B | |
| | 70-79 = C $60-69 = D$ | |
| | | |
| | 0-59 = F | |
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COURSE DESCRIPTION

Interpretation and creation of construction plans using hand drafting, CAD, and BIM methods. Required CNET major course.

COURSE PREREQUISITES

None.

COURSE MATERIALS:

- No required text book
- All materials to be provided in class/on Blackboard, including presentations, tutorials, excerpts from manuals, etc.

COURSE OBJECTIVES:

At the conclusion of this course, you should be able to:

- *explain* the concepts of construction drawings and the influence of construction information in plans and specifications.
- *discuss* the purpose and appropriateness of preparing and presenting drawings in various formats, including hand drafting, CAD, and BIM.
- *utilize* various formats, including hand drafting, CAD, and BIM, in the preparation of basic architectural drawings.

COURSE OUTCOMES (ABET Student Outcomes Addressed):

- #4 Producing and utilizing design, construction, and operations documents (ABET #1 an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline).
- #9 Designing systems, components, or processes for broadly defined engineering technology problems appropriate to program educational objectives (ABET #2 an ability to design solutions for well-defined technical problems and assist with engineering design of systems, components, or processes appropriate to the discipline).

COURSE POLICY/GRADING:

Lab Exercises and Project Submissions:

- There will be 10 lab exercises, towards 50% of your overall grade.
- These exercises will be due strictly based on the schedule shown in the course outline, unless specifically stated otherwise by the instructor.
- The grading for exercises will be specific to each, with criteria provided in each exercise handout.
- Only one late lab exercise will be accepted during the semester. It may be handed in by the lab session following the due date, and it will be graded at a 30% penalty.
- There will a final project worth 20% of the overall grade.

Exams:

- There will be one midterm exam:
- The final exam will be administered at a time TBD by UNT during the Final Exam period.
- All exams will be closed book.

COURSE OUTLINE: tentative and subject to changes

| WEEK | TOPIC | WORK DUE |
|------|---|-------------|
| 1 | Introduction to course. Drafting: Basics of technical drawing. | Lab Ex. #1 |
| 2 | Drafting: Lettering, dimensioning, and making notes. | Lab Ex. #2 |
| 3 | Drafting: Architectural details. | Lab Ex. #3 |
| 4 | CAD: Intro, basic tools, and element attributes. | Lab Ex. #4 |
| 5 | CAD: Linear elements and measurement tools. | Lab Ex. #5 |
| 6 | CAD: Manipulation and modification. | Lab Ex. #6 |
| 7 | MIDTERM EXAM | |
| 8 | BIM: Intro, datums, and layout. | Lab Ex. #7 |
| 9 | BIM: Walls, Doors and windows. | Lab Ex. #8 |
| 10 | BIM: Floors, ceilings, and roofs. | Lab Ex. #9 |
| 11 | BIM: Dimensions, views, etc. | Lab Ex. #10 |
| 12 | BIM: Review | |
| 13 | Thanksgiving Break- University Closed | |
| 14 | Final Project | |
| 15 | Final Project Presentation | |
| 16 | FINAL EXAM | |

POLICIES

Academic Integrity: https://deanofstudents.unt.edu/academic-integrity

This course will adhere to UNT academic policies, including those for academic integrity

(http://vpaa.unt.edu/academic-integrity.htm) and overall conduct (http://deanofstudents.unt.edu/conduct).

It is your responsibility as a UNT student to be familiar with these policies, but feel free to ask the instructor any questions pertaining to these.

ADA Policy

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Office of Disability Accommodation website at http://disability.unt.edu/. You may also contact them by phone at 940.565.4323.

Important Notice for F-1 Students taking Distance Education Courses

Federal Regulation

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the Electronic Code of Federal Regulations website at http://www.ecfr.gov/. The specific portion concerning distance education courses is located at Title 8 CFR 214.2 Paragraph (f)(6)(i)(G).

The paragraph reads:

(G) For F-1 students enrolled in classes for credit or classroom hours, no more than the equivalent of one class or three credits per session, term, semester, trimester, or quarter may be counted toward the full course of study requirement if the class is taken on-line or through distance education and does not require the student's physical attendance for classes, examination or other purposes integral to completion of the class. An on-line or distance education course is a course that is offered principally through the use of television, audio, or computer transmission including open broadcast, closed circuit, cable, microwave, or satellite, audio conferencing, or computer conferencing. If the F-1 student's course of study is in a language study program, no on-line or distance education classes may be considered to count toward a student's full course of study requirement.

University of North Texas Compliance

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the instructor) can include activities such as taking an on-campus exam, participating in an on-campus lecture or lab activity, or other on-campus experience integral to the completion of this course.

If such an on-campus activity is required, it is the student's responsibility to do the following:

(1) Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course.

(2) Ensure that the activity on campus takes place and the instructor documents it in writing with a notice sent to the International Student and Scholar Services Office. ISSS has a form available that you may use for this purpose.

Because the decision may have serious immigration consequences, if an F-1 student is unsure about his or her need to participate in an on-campus experiential component for this course, s/he should contact the UNT International Student and Scholar Services Office (telephone 940-565-2195 or email internationaladvising@unt.edu) to get clarification before the one-week deadline.