

COURSE

DRFT 2253 Architectural Design

CATALOG DESCRIPTION

This course is designed to address the procedures and practices necessary to produce a full set of commercial building construction documents. Students are provided opportunities to develop commercial details using time and quality design techniques. In addition to numerous detailing projects will be lectures on various building systems and their application to large-scale construction documents. (Offered Fall & Spring)

PREREQUISITES

DRFT 2143 (Any Option) or Consent of Instructor

CREDIT HOURS

3 credit hours, counting toward any of the CADD Program Degree Options or Certificate Programs.

TARGET AUDIENCE AND TRANSFER

In general, DRFT 2253 students have had DRFT 2143 AutoCAD I drafting training or entry-level experience in drafting employment. This is an intermediate drafting course and therefore assumes knowledge of beginning level drafting techniques, so the initial emphasis is on the use of more advanced level AutoCAD skills for Architectural Design.

GENERAL COURSE OBJECTIVES The five general goals of this course are:

- ◆ Orient Students to the range of methods, topics, and occupations that characterize the field.
- ◆ Introduce students to the use of CAD commands, procedures, and standards for work in a professional Architecture firm.
- ◆ Introduce students to time and quality drafting techniques.
- ◆ Provide Students with opportunities to develop advanced drafting skills with respect to drawing sheet composition and working neatly and accurately.
- ◆ Encourage construction field observation & analysis.

LEARNING OBJECTIVES for all NWACC CADD sections establish that a successful student will be able to:

1. Use their intellect
2. Share divergent views as expressed in research
3. Examine and grow in understanding of values
4. Participate in criteria that are clearly defined, coherent, and intellectually rigorous
5. Resolve to a level of proficiency in skills and competencies essential for college-educated adults
6. Engage critical thinking skills and independent problem solving
7. Combine theory and application

TECHNOLOGY OBJECTIVES for all NWACC CADD sections establish that a successful student will be able to:

1. Demonstrate fundamental CAD skills necessary for a variety of occupational settings.
2. Apply principles of CAD technologies & problem solving to complete a variety of project task.
3. Share new production techniques and topics with business and industry.
4. Perform within guidelines that are ethical and practical to a mix of businesses.
5. Meet the changing demands of our regional CAD workforce.

Project III Wood & Plastics or Thermal & Moisture Protection

Project IV Door & Windows or Finishes

Section III **Preparing Architectural Drawings**

- Structural Considerations Affecting Construction
- Project Manuals & Written Specifications
- Land Descriptions & Drawings
- Floor Plan Components, Symbols and Development
- Orthographic Projection & Elevations
- Roof Plan Components & Drawings
- Drawing Sections, Wall Sections, & Details
- Interior Elevations
- Ramp, Stair, & Elevator Drawings

Project V Specialties or Equipment

Project VI Furnishings or Special Construction

Section IV **Preparing Structural Drawings**

- Drawing Framing Plans
- Drawing Structural Elevations & Sections
- Foundation Systems & Components

Project VII Conveying Systems or Mechanical

Project VIII Electrical

COURSE INFORMATION FOR INSTRUCTORS ONLY

CONTACT/ LOAD HOURS: 3 contact hours per week / 3 load hours for remuneration.

REQUIRED INSTRUCTIONAL ACTIVITIES

- ◆ It is required that all instructors who teach this course cover all the topics listed above. If difficulties arise, early contact must be made with the lead faculty to find and share ideas to deliver remaining content. Naturally, no optional section can be done in lieu of required section(s).
- ◆ Individual instructors' syllabi must contain required components. The upper portion of this course outline may be distributed but is not sufficient alone as a syllabus.
- ◆ Topics listed as General, Learning, & Technology Objectives should be emphasized thoroughly enough so students can smoothly transition into the next course sequence.
- ◆ A key objective for this course is that students should be able to work under constraints of time and quality drafting standards. A student's success in Architectural Design is dependent on these skills.
- ◆ Check student method and process to ensure that logical process and thinking are involved.
- ◆ The standard grading scale should be as follows, unless otherwise approved: [90,100%]=A, [80,90)=B, [70,80)=C, [60,70)=D
- ◆ Due to the nature of this course there is no final exam. However, the grade for this course is affected by design performance and consistency of effort throughout the entire semester.
- ◆ Given the full curriculum of required topics and beneficial optional content, instructors should conduct all classes for the duration of the class period.

INSTRUCTOR RESOURCES

1. Instructor supplements for Building Construction Illustrated, Third Edition are made available by the CAD Program Director. Additional copies may be obtained from the publisher.
2. Projection equipment will be made available in the MAT Rm. #106. Tack surfaces are available outside the room 106 door.
3. Faculty workrooms in most buildings offer computer, mail, and copier access, some classroom supplies, a phone, and storage space. Additional NWACC Library books, professional development resources, and databases can be used. Phone: 619-4244.
4. NWACC's Testing Center, 619-4317, can assist with testing accommodations.
5. NWACC Student Services and the Life Development Center can assist with Early Alert Referrals (619-4230), student recognition (619-4133), and the Office of Disabilities (619-4384).
6. The Faculty Handbook, NWACC Board of Trustees Policy Manual, and other materials are available in the division office and on the shared "K" drive of the College network.
7. Bound instructor syllabi from past semesters, indicating evaluation and attendance methods used, are available in the division office.