Course Description: An introduction to architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for residential structure with emphasis on light frame construction methods.

Prerequisite: DFTG 1309 and 1317

This class will utilize the required text throughout the entire semester; therefore, having a book is essential.

Software: Autodesk Revit

The student will need to provide his/her own:
USB Flash Drive
Architectural Scale
Engineering Scale
Mechanical Drafting Pencil
Soft Eraser
Sketch book
Sketching Pencils
Highlighters

Course Goals/Objectives: The following list of course goals will be addressed in the course. The goals are directly related to the performance objectives. Upon successful completion of the course the student will:

1. Design and draw a Residential Floor Plan using accepted symbols and techniques.
2. Dimension a Floor Plan in a clear and precise manner.
3. Draw a roof using a typical Roof Scope or Pitch.
4. Draw a typical exterior elevation which demonstrates proper techniques.
5. Design and draw a Foundation Plan for a typical residential structure.
6. Recognize Platform and Balloon Framing.
7. Plan appropriate floor support using joists or trusses for a structure.
8. Explain methods of Frame Wall Construction.
9. Sketch the various types of exterior walls used in residential construction.
10. Draw proper door and window symbols on a typical floor plan.
11. Interpret the information shown in a window and door detail.
12. Design a stairway for a residential structure.
14. Apply the appropriate principles to design a typical fireplace.
15. Plan for the electrical needs of a modern home.
16. Define typical residential electrical terms.
17. Draw an electrical plan for a residential structure.
18. Prepare a schematic diagram of a residential water and waste removal system.
19. Develop a residential plumbing plan.
20. Draw plumbing symbols and fixtures on a plumbing plan using proper techniques.
21. Discuss the components of a complete climate control system.
22. Draw a climate control plan using proper symbols and conventions.
23. Compare Direct, Indirect, and Isolated Passive solar gain systems.
24. List several advantages and disadvantages of domes.
25. Discuss advantages and disadvantages of new products and methods of construction.
26. List the advantages of modular applications in the construction industry.
27. Prepare one or two point perspective drawings using office methods.
28. Devise a typical presentation floor plan.
29. Explain the various types of architectural models used to represent residential structures.
30. Recognize the format followed by typical contract specification sheets.

Student Contributions and Class Policies:

1. Students are expected to exhibit professional behavior during scheduled class times.
2. Regular and punctual attendance is expected of all students in all classes for which they have registered.
3. All absences are considered to be unauthorized unless the student is absent due to sickness or emergencies.
4. The instructor is responsible for judging the validity of any reasons given for absence.
5. Students will not be allowed to make up an examination missed due to an absence unless they have reasons acceptable to the instructor.
6. Students may be dropped from a class by the registrar, on or before the twelfth day of class, upon recommendation of the instructor who feels the student has been unjustifiably absent or tardy a sufficient number of times to preclude meeting the course objective.
7. After the twelfth day of class, it is the student's responsibility to initiate the drop in the Office of Student Services. Failure to do so may result in the students receiving a grade of “F.”
8. Students are responsible for maintaining, organizing, and backing-up copies of all digital files. Failure to maintain an up-to-date backup may result in data loss.
9. Students MUST actively participate by completing an academic assignment required by the instructor by the official census date. Students who do not actively participate in an academically-related activity will be reported as never attended and dropped from the course.
Evaluation of Students:

Attendance and regular daily work ........... 70%
Periodic tests ........................................... 20%
Final Exam................................................. 10%

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90 and above</td>
<td>A</td>
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<tr>
<td>80-89</td>
<td>B</td>
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<tr>
<td>70-79</td>
<td>C</td>
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<tr>
<td>60-69</td>
<td>D</td>
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<tr>
<td>0-59</td>
<td>F</td>
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Course Schedule:

This class meets two or four times a week, for a total of two (2) lecture hours and four (4) lab hours.

Due dates for course assignments will be announced throughout the semester. This will be subject to the progression of the class, therefore attendance is very important.
INFORMATION:
Students will acquire and evaluate information from existing sources and determine its relevance and accuracy as needed to build a systematic information base. Students will employ computers to acquire, organize, analyze, and communicate information.

TECHNOLOGY:
Applies technology to task, understands overall intent and proper procedures for setup and operation of equipment and computer hardware and software.

READING:
Students will locate, understand, and analyze data in documents including manuals, graphs, and schedules to perform tasks. The students will learn from a text to determine the main idea or essential message, the relevant facts and specifications, the meaning of unknown or technical vocabulary, and the appropriateness of theories of other writers.

MATHEMATICS:
Approaches practical problems by choosing appropriately from a variety of math techniques. Students will use basic math calculations throughout the course work.

LISTENING/SPEAKING:
Students will receive, attend to, interpret, and respond to verbal messages and other cues such as body language in ways that are appropriate to the purpose; for example, to comprehend; to learn; to critically evaluate; to appreciate; or to support the speaker.

PERSONAL QUALITIES:
The students will display responsibility, self-esteem, sociability, self-management, integrity and honest toward goal attainment and perseverance.

Students with Disabilities:
Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact Shep Grinnan as soon as possible. Mr. Grinnan’s office is located in the Scharbauer Student Center Building. These conditions may include documented physical or educational disabilities. Please be aware that services or accommodations are not automatic. Each student must request them and secure the proper authorizations/documentation.
Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individuals have been designated to handle inquiries regarding the non-discrimination policies: Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu. For further information on notice of non-discrimination, visit http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm or call 1 (800) 421-3481.

Spanish

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