Course Title: COMPUTER AIDED DESIGN  
SUMMER 2020  
BATSON

Course Prefix: ARCH  
Course No.: 2223  
Section No.: P01

Department of:  
Architecture ☑  
Construction Science ☐  
Community Development ☐  
Art ☐  
School of Architecture

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U.S. Postal Service Address: Prairie View A&M University  
P.O. Box 519  
Mail Stop 2100  
Prairie View, TX 77446

Office Hours: MW 8:00AM to 11:00AM & 3:30PM 5:00PM TR 8:00AM to 9:30AM & 3:30PM 5:00PM
Virtual Office Hours: NA

Course Location: Nathelyne Archie Kennedy Building, CAD Lab RM 223
Class Meeting Days & Times: TR 11:00AM to 12:20PM

Catalog Description: "(3-0) Credit 3 semester hours. Introduction to the range and potential of computer-aided design and electronic media in problem solving and conceptual design."  

Prerequisites: None  
Co-requisites: None  
Required Text: None
Recommended Text/Readings:

Access to Learning Resources:  
PVAMU Library:  
Telephone: (936) 261-1500;  
web: http://www.tamu.edu/pvamu/library/

University Bookstore:  
Telephone: (936) 261-1990;  
web: https://www.bkstr.com/Home/10001-10734-1?demoKey=d

Course Goals or Overview:  
The goal of this course is to introduce the beginning students to both basic and more sophisticated procedures using computer-aided drawing and to enable the student to become proficient in construction and editing of basic and complex drawings digitally.

Course Outcomes/Objectives  
At the end of this course, the student will:
1. Be able to Size, Scale and Plot drawings professionally
2. Be able to utilize and create professional line weights and line types
3. Demonstrate the ability to be proficient in all editing and drawing commands.
4. Be able to construct drawings in 2 and 3 dimensional form
Course Requirements & Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

**Exams** – written tests designed to measure knowledge of presented course material

**Exercises** – written assignments designed to supplement and reinforce course material

**Class Participation** – daily attendance and participation in class discussions

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<th>Grading Matrix</th>
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<td>Final Exam</td>
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<td><strong>Total:</strong></td>
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**Grade Determination:**
- **A** = 90 to 100: Exceptional quality in ALL WORK and professionalism
- **B** = 80 to 89.99: Above average quality in all work and exceptional professionalism
- **C** = 70 to 79.99: Average Quality in all work
- **D** = 60 to 69.99: Below average quality in majority of work
- **F** = 59.99 and below: Failure in majority of work

**Course Procedures**

Submission of Assignments: All work must be submitted on time. Work not submitted on time will be classified as late (except under documented circumstance) and receive a 50% reduction in actual grade.

**Formatting Documents:**
Microsoft Word is the standard word processing tool used at PVAMU. If you’re using other word processors, be sure to use the “save as” tool and save the document in either the Microsoft Word, Rich-Text, or plain text format.

**Quiz Policy**
Quizzes should be taken as scheduled. No makeup quizzes will be allowed except under documented emergencies (See Student Handbook).

**Professional Organizations and Journals**


**References**


**Addendum**
Students enrolled in the course will receive an “Addendum” that will contain detailed information on the following topics:
- Accreditation/Assessment Criteria
- Instructor’s Attendance and Participation Policy
- Personal Conduct
- Conduct of the Class and Care of the Facility
- Detailed Course Schedule
- Statement of Agreement
Week One: Topics & Assignments: Simple Drawing; points, lines and simple geometric shapes.

Assignments:

- Drawing 1
- Drawing Complex shapes-Print/Plotting; line weights and line types
- Use of Arc, Circle, Ellipse, and 2 and 3 Point circles
- Use of Arc, Circle, Ellipse, and 2 and 3 Point circles

Week TWO: Topics & Assignments: Scaling notation, Block use Block creation and WBlock creation

Assignments:

- Drawing 4
- Layers and creation and naming of Layers
- Dimensioning and dimensioning styles and notes
- Paper Space and Model Space

Week THREE: Topics:

- Work on final CAD Assignment Introduce Revit Basic Commands

Assignments:

- Drawing 8
- Floor Plans and Elevations
- QUIZ

REVIT 100 Commands

Week FOUR: Topic & Assignments: Advanced Revit Commands

Assignments:

- Begin Final Revit IDrawing
- Drawing 8

Week FIVE: Topic & Assignments: Work on Final Project

Assignments:

- Finalize Final Project

Final Project Due

Have a Great SAFE rest of the Summer!!!!

I. ACCREDITATION/ASSESSMENT CRITERIA

This course is structured to assist the student meet the following criteria shown in Table No. 1 as established by the National Architectural Accreditation Board (NAAB). To view the entire list, go to the NAAB website, www.naab.org and access “2009 NAAB Conditions for Accreditation.”

Table No. 1-NAAB CRITERIA

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Ability ☑</th>
<th>Understanding ☑</th>
<th>Course Learning Outcomes Competencies (T, R, I)</th>
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<tbody>
<tr>
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<td>Taught</td>
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<tr>
<td>A.1. Communications Skills (Ability)</td>
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<td>A.2. Design Thinking Skills (Ability)</td>
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### A. General Objectives

<table>
<thead>
<tr>
<th>Skill/Understanding</th>
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<tbody>
<tr>
<td>A.3. Visual Communication Skills (Ability)</td>
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<td>A.4. Technical Documentation (Ability)</td>
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<td>A.5. Investigative Skills (Ability)</td>
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<td>A.6. Fundamental Design Skills (Ability)</td>
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<td>A.7. Use of Precedents (Ability)</td>
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<td>A.8. Ordering Systems Skills (Understanding)</td>
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<td>A.9. Historical Traditions and Global Culture (Understanding)</td>
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<td>A.10. Cultural Diversity (Understanding)</td>
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<td>A.11. Applied Research (Understanding)</td>
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<td>B.1. Pre-Design (Ability)</td>
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<td>B.2. Accessibility (Ability)</td>
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<td>B.3. Sustainability (Ability)</td>
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<td>B.4. Site Design (Ability)</td>
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<td>B.5. Life Safety (Ability)</td>
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<td>B.6. Comprehensive Design (Ability)</td>
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<td>B.7. Financial Considerations (Understanding)</td>
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<td>B.8. Environmental Systems (Understanding)</td>
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<td>B.9. Structural Systems (Understanding)</td>
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<td>B.10. Building Envelope Systems (Understanding)</td>
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<td>B.11. Building Service Systems (Understanding)</td>
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<td>B.12. Building Materials &amp; Assemblies (Understanding)</td>
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### University Rules and Procedures

#### Disability statement (See Student Handbook):

Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

#### Academic misconduct (See Student Handbook):

You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

#### Forms of academic dishonesty:

1. **Cheating**: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
2. **Academic misconduct**: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
3. **Fabrication**: use of invented information or falsified research.
4. **Plagiarism**: unacknowledged quotation and/or paraphrase of someone else’s words, ideas, or data as one’s own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one’s own work also constitutes plagiarism.

#### Nonacademic misconduct (See Student Handbook)

The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor’s ability to conduct the class, (2) the inability of other students to profit from the instructional program, or
(3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

**Sexual misconduct (See Student Handbook):**
Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

**Attendance Policy:**
Prairie View A&M University requires regular class attendance. Excessive absences will result in lowered grades. Excessive absenteeism, whether excused or unexcused, may result in a student’s course grade being reduced or in assignment of a grade of “F”. Absences are accumulated beginning with the first day of class.

**Student Academic Appeals Process**
Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

**Netiquette (online etiquette):** students are expected to participate in all discussions and virtual classroom chats when directed to do so. Students are to be respectful and courteous to others in the discussions. Foul or abusive language will not be tolerated. When referring to information from books, websites or articles, please use APA standards to reference sources.

**Technical Support:** Students should call the Prairie View A&M University Helpdesk at 936-261-2525 for technical issues with accessing your online course. The helpdesk is available 24 hours a day/7 days a week. For other technical questions regarding your online course, call the Office of Distance Learning at 936-261-3290 or 936-261-3282

**Communication Expectations and Standards:**
All emails or discussion postings will receive a response from the instructor within 48 hours.

You can send email anytime that is convenient to you, but I check my email messages continuously during the day throughout the work-week (Monday through Friday). I will respond to email messages during the work-week by the close of business (5:00 pm) on the day following my receipt of them. Emails that I receive on Friday will be responded to by the close of business on the following Monday.

**Submission of Assignments:**
Assignments, Papers, Exercises, and Projects will distributed and submitted through your online course. Directions for accessing your online course will be provided. Additional assistance can be obtained from the Office of Distance Learning.

**Discussion Requirement:**
Because this is an online course, there will be no required face to face meetings on campus. However, we will participate in conversations about the readings, lectures, materials, and other aspects of the course in a true seminar fashion. We will accomplish this by use of the discussion board.

Students are required to log-on to the course website often to participate in discussion. It is strongly advised that you check the discussion area daily to keep abreast of discussions. When a topic is posted, everyone is required to participate. The exact use of discussion will be determined by the instructor.

**It is strongly suggested** that students type their discussion postings in a word processing application and save it to their PC or a removable drive before posting to the discussion board. This is important for two reasons: 1) If for some reason your discussion responses are lost in your online course, you will have another copy; 2) Grammatical errors can be greatly minimized by the use of the spell-and-grammar check functions in word processing applications. Once the post(s) have been typed and corrected in the word processing application, it should be copied and pasted to the discussion board.

ARCH 2223  COMPUTER AIDED DESIGN and BIM  COURSE SYLLABUS
PRAIRIE VIEW A&M UNIVERSITY  W. J. BATSON Jr.  SCHOOL OF ARCHITECTURE