# ARCH 2266: Design IV Syllabus

**Course Title:** Design IV

**Course Prefix:** ARCH  
**Course No.:** 2266  
**Section No.:**

**School of Architecture**  
**Department:** Architecture

**Course Location:** Nathelyne Archie Kennedy Building, Room 117

**Class Meeting Days & Times:**  
Monday and Wednesday 1:00AM to 3:20 PM  
Tuesday and Thursday 1:00AM to 3:20 PM

**Catalog Description:** (6-0) Credit 6 semester hours. Analysis and design of structures of advanced complexity with emphasis on interrelationships of building systems.

**Prerequisites:** Prerequisite: ARCH 2256 Minimum grade of C

**Co-requisites:** ARCH 2223 Beginning CAD

**Mode of Instruction:** Face-to-face

**Instructor:**  
Sheba Akhtar, Assistant Professor of Practice  
W J Batson Assoc. Prof. / Dir. Community Urban & Rural Enhancement Service

**Office Location:** School of Architecture, Prairie View A&M University, Rooms 249, 250

**Office Telephone:** (936) 261-9834 / (936) 261-9837

**Fax:** (936) 261-9826

**Email Address:**  
[wjbaton@pvamu.edu](mailto:wjbaton@pvamu.edu); [shakhtar@pvamu.edu](mailto:shakhtar@pvamu.edu)

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

**Office Hours:**  
Sheba Akhtar: Mon., Tue., Wed., Thu.: II:00AM-1:00PM & BY APPOINTMENT.  
W J Batson: M, W: 8:30-11:00AM; 3:00-5:00PM  
T, Th: 8:00-9:30AM; 3:40-4:40PM & BY APPOINTMENT
### Required Text:

### Optional Text:
- The Professional Practice of Architectural Working Drawings (3rd Edition); Authors: Osamu A. Wakita and Richard M. Linde; Publisher: John Wiley & Sons, Inc.; ISBN: 0-471-39540-4
- Construction of Architecture; From Design to Build; Author: Ralph W. Liebing, RA, CSI; Publisher: John Wiley & Sons, Inc. ISBN: 978—0-471-78355-8

### Learning Resources
**PVAMU Library:** Telephone: (936) 261-1500; web: [http://www.tamu.edu/pvamu/library/](http://www.tamu.edu/pvamu/library/)
Use the Reference Desk at the library where the staff is eager to guide your research. They can orient you to hard copies and on-line resources.

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

**The Writing Center** - Telephone: (936) 261-3700
The Writing Center’s goal is to provide a friendly, stress-free environment for students from all over campus to meet with a consultant and talk about writing of all types. They provide a responsive audience and advice from experienced writers in sessions generally lasting thirty to forty-five minutes. Sessions of this length work individually with students on any aspect of the writing process: from brain-storming and drafting, to revising and proofreading. They will explore ways to improve student’s overall writing skills.

**Student Academic Success Center** - Telephone: (936) 261-1040
Student Academic Success Center identifies academic and social roadblocks that interfere with persistence and timely graduation of PVAMU students. SASC informs campus-wide policies by staying current with retention literature and best practices. Further, SASC develops programs and services that are specifically aimed at continuing the academic success of the first year. We strive to provide PVAMU students with “Navigation to Graduation”.

**The Tutoring Center**
John B. Coleman Library in Room 209 - Telephone: (936) 261-1561
Hours: Monday through Thursday 12 pm to 9 pm and Friday from 8AM to 5PM.
Email: AEtutoring@pvamu.edu

### Architectonic Sculpture, Art & Form
by Le Corbusier

### Course Goals and Overview:
The goal of this course is for students to learn effective ways to research, program and integrate various building systems, technology and the environment especially as these aspects relate to the design of structures of advanced complexity and building systems.

### Course Outcomes/Learning Objectives
At the end of this course, the students will:

1. Develop the ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions and test alternative outcomes against relevant criteria and standards **design thinking skills** and be able to apply them in design.

2. Develop the ability to understand and develop the ability to examine and comprehend the fundamental principles in relevant practices of **Architectural Design Skills** and to make informed choices about the incorporation of such principles into architecture and urban design projects.

3. Understand the principles of design, programming, design development, site analysis and incorporate fundamentals of Net Zero in the design process and outcome.

4. Be able to execute and present a comprehensive design project assignment before an independent panel of jurist and an informed critique.

5. Understand the diverse needs, values, physical abilities (ADA) and social and spatial patterns that characterize different cultures and individuals and the responsibility of the architect to ensure equity of access to sites buildings and structures.

6. Be trained and be able to utilize the Manual and Digital Fabrication Laboratory as a tool to facilitate design and professional presentations.
Course Requirements & Evaluation Methods
This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

- **Assignments/Papers/Exercises**: Written assignments designed to supplement and reinforce course material
- **Exams**: Written tests designed to measure knowledge of presented course material
- **Projects**: Assignments designed to measure ability to apply presented course material
- **Class Attendance/Participation**: Daily attendance and participation in class discussions

Grading Matrix

<table>
<thead>
<tr>
<th>Category</th>
<th>Assignment/Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>-2pts per absence; -1pts left early -.5pt. late</td>
<td>20</td>
</tr>
<tr>
<td>Project 1 Research</td>
<td>25/25 Adjective, 15/15 Concepts and 10/10 Precedents</td>
<td>10</td>
</tr>
<tr>
<td>Project 1 Project Narrative</td>
<td>Narrative (min. 100 words) clear, and excellent grammar</td>
<td>5</td>
</tr>
<tr>
<td>Project 1 Study Models (3)</td>
<td>Study Models with Aesthetic Form and Fenestration</td>
<td>15</td>
</tr>
<tr>
<td>Project 1 Final Site &amp; Model</td>
<td>Base, Site, Parking, Landscape et al. with Model to Scale</td>
<td>10</td>
</tr>
<tr>
<td>Project 1 Chapel Design Final Dwg.</td>
<td>Site Plan, Floor Plan, Section, Elevations, 3D views, et al.</td>
<td>20</td>
</tr>
<tr>
<td>Project 2 Research and Process Work</td>
<td>Precedents (15) and Process Dwg. Concepts (10)</td>
<td>25</td>
</tr>
<tr>
<td>Project 2 Site &amp; Model in context</td>
<td>Base, Site, parking, landscape et al. with Model to scale</td>
<td>15</td>
</tr>
<tr>
<td>Project 2 Model 2</td>
<td>Study Model with Aesthetic Form and Fenestration</td>
<td>10</td>
</tr>
<tr>
<td>Final Museum Quality Final Model 3</td>
<td>Base and north arrow and 4 types of wood sizes</td>
<td>20</td>
</tr>
<tr>
<td>Final Museum Quality Drawings</td>
<td>Site Plan, Plan, Section, Elevations(4), 3D views (4) et al.</td>
<td>25</td>
</tr>
<tr>
<td>Semester Portfolio</td>
<td>Portfolio work with Descriptions, Resume Cover &amp; Thank You</td>
<td>10</td>
</tr>
<tr>
<td>Semester Notebook</td>
<td>Min. 2” spiral with 15 weekly tabs Min. 5 Xeroxes entries from outside source on weekly topic</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td></td>
</tr>
</tbody>
</table>

Grade Determination:
- A = 90 to 100 Exceptional quality in all work and professionalism
- B = 80 to 89.9 Above average quality in all work with professional
- C = 70 to 79.9 Average Quality in all work
- D = 60 to 69.9 Below average quality in majority of work
- F = 59.9 and below Failure in majority of work

Course Procedures

+ University 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 assignment of a grade of "F." Absences are accumulated beginning with the first day of class.

Instructor’s Attendance and Participation Policy
  Each unexcused absence will receive a two (-2) point deduction from your overall grade. Each tardy will receive a two (-.05) point deduction from your overall grade.
  Each time you leave early without instructor approval you will receive a two (1) point deduction from your overall grade.
  *Failure to adhere and comply with classroom etiquette and rules will receive a minimum two (-2) point reductions for each infraction.
  Participation and absences are accumulated beginning with the first day of class on Monday, January 13, 2020. If you do not come to class, you may assume that you have received zero (0) points for the class period unless you have a university approved excuse in one of the following classifications:
  1. Participation in activity appearing on the University authorized activity list.
  2. Death or major illness in a student’s immediate family.
  3. Illness of a dependent family member.
  4. Participation in legal proceedings that requires a student’s presence.
  5. Religious holy day.
  6. Confinement because of illness.
  7. Required participation in military duties.
If you miss class for one of these reasons, you must provide a memorandum plus supporting documentation to clear the absence from your record. These documents will be accepted for ONE WEEK AFTER THE ABSENCE HAS OCCURRED. This includes student-athletes who are to provide university forms for reporting absences to participate in approved competitions. Emails will not be accepted to clear these absences.

### Personal Conduct

Students and faculty are expected to conduct themselves in ways that support individual learning and the learning of others. To that end members of the classroom community will conduct themselves in a professional and ethical manner to achieve these objectives. Any conduct construed to interfere with the learning opportunities of members of the class may result in the removal of the student from the class for that day. Repeated inappropriate conduct will result in permanent removal from the class. Based upon the fact that you are preparing for professional employment, you are expected to adhere to the following specific guidelines:

1. During regular class periods all students are expected to dress appropriately in accordance with university regulations.
2. No hats or caps will be allowed to be worn in the classroom during class sessions.
3. Dress Code for Presentations: Professional dress is expected for all design and technical presentations in class.
4. No food or drink is allowed in the classroom at any time.
5. Cellular telephones are to be turned off or put on silent ring tone during the class period. Texting is strictly prohibited during the class period. **No “ear phone” units will be allowed.**
6. Laptops must emit no noise. Make sure your laptop is warmed up and your battery charged before class starts. A laptop is allowed only for taking notes or accessing relevant course material during the class. **Checking email, playing a game, messaging and other non-class related activities are not allowed at any time and will result in a -1 point semester grade deduction.**
7. Harassment of your fellow students of any kind will not be tolerated.
8. No children, friends, family members or guests are allowed in the class without prior approval.

### Conduct of the Class and Care of the Facility

Please note the following rules for the conduct of the class.

1. Class will begin at the appointed time.
2. Class is dismissed when so indicated by the instructor. Students are expected to be on time and stay throughout the entire class period. **Leaving the classroom before the class is dismissed without prior approval from the instructor will result in a -1 point semester grade reduction**
3. All class members are required to keep the classroom in a clean and orderly manner to facilitate the number of students using it each day.
4. **All Lecture Notes and Handouts should be recorded in your semester 3-ring notebook**

### Submission of Assignments:

Assignments are due at the start of the class session. No late work will be accepted without proper documentation. **If you are unable to attend class your WORK SHALL BE EMAILED ON OR BEFORE THE Assignment DUE DATE**

### Formatting Documents:

Microsoft Word is the standard word processing tool used at PVAMU. If you are using other word processors, be sure to save the document in the Microsoft Word, Rich-Text, or Text format.

### Exam Policy:

Exams should be taken as scheduled. **No makeup examinations will be allowed except under documented emergencies (See Student Handbook).**

### 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. Students should also inform the instructor of their need for accommodations immediately at the outset of the course so that a solution designed to being successful in class can be produced.

#### Academic Misconduct

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. **(See Student Handbook):**

#### Forms Of Academic

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
### Dishonesty:
1. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
2. Fabrication: use of invented information or falsified research.
3. 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.

### 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.

### ACCREDITATION/ASSESSMENT CRITERIA Table No. 1-NAAB 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](http://www.naab.org) and access “2014 NAAB Conditions for Accreditation.”

<table>
<thead>
<tr>
<th>Performance Criteria:</th>
<th>Ability</th>
<th>Understanding</th>
<th>Course Learning Outcomes Competencies (T, R, I)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T Taught</td>
<td>R Reinforced</td>
<td>I Utilized/Integrated</td>
</tr>
</tbody>
</table>

### REALM A: Critical Thinking and Representation

| A.1. Professional Communication Skills (Ability) | ✓ |
| A.2. Design Thinking Skills (Ability) | ✓ |
| A.3. Investigative Skills (Ability) | ✓ |
| A.4. Architectural Design Skills (Ability) | ✓ |
| A.5. Ordering Systems (Ability) | ✓ |
| A.6. Use of Precedents (Ability) | ✓ |
| A.7. History and Global Culture (Understanding) | ✓ |
| A.8. Cultural Diversity and Social Equity (Understanding) | ✓ |

### REALM B: Building Practices, Technical Skills, and Knowledge

<p>| B.1. Pre-Design (Ability) |   |
| B.2. Site Design (Ability) |   |
| B.3. Codes and Regulations (Ability) |   |
| B.4. Technical Documentation (Ability) | ✓ |
| B.5. Structural Systems (Ability) |   |
| B.6. Environmental Systems (Ability) |   |
| B.7. Building Envelope Systems and Assemblies (Ability) |   |
| B.8. Building Materials and Assemblies (Understanding) |   |
| B.9. Building Service Systems (Understanding) |   |
| B.10. Financial Considerations (Understanding) |   |</p>
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Tentative Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>January 13</td>
<td>Class Introduction, Course Syllabus Review and Project Introduction Introduction - Project 1: Chapel Design Precedents and Concepts (min. 25 word definitions) 50 graphics: 25/25 Adjectives, 15/15Concepts and 10/10Precedents</td>
</tr>
<tr>
<td>Week 2</td>
<td>1/21</td>
<td><strong>Due:</strong> ALL 50 graphics plus 3 chosen Concept Models Narrative, Site Plan with Site Analysis diagrams</td>
</tr>
<tr>
<td>Week 3</td>
<td>1/27</td>
<td><strong>Due:</strong> Study Model with Preliminary Form, Fenestration and Aesthetics Floor Plan generation, Preliminary Section and Elevations (4)</td>
</tr>
<tr>
<td>Week 4</td>
<td>February 03</td>
<td><strong>Due:</strong> Site Plan, Floor Plan, Section and Elevations (4) finalization Schematic Design Model 1</td>
</tr>
<tr>
<td>Week 5</td>
<td>02/10</td>
<td><strong>Due:</strong> Final Drawings, Site Model &amp; Building Model Begin Project 2 - Research and Development</td>
</tr>
<tr>
<td>Week 6</td>
<td>2/17</td>
<td>History, Project Program, Design Concept, Empirical Data and Viticulture, Site Plan Analysis, Design Idea and Programming</td>
</tr>
<tr>
<td>Week 7</td>
<td>2/24</td>
<td><strong>Due:</strong> Study Model Floor Plan generation: Form, Function, Fenestration and Design Aesthetics</td>
</tr>
<tr>
<td>Week 8</td>
<td>March 02</td>
<td><strong>Due:</strong> Floor Plan Design Development 3/09 to 3/15 Have a Happy Healthy safe Spring Break!</td>
</tr>
<tr>
<td>Week 9</td>
<td>3/16</td>
<td>Net Zero Concepts, Materials, Sections (2) with Net Zero Strategies, Detailed Wall Section</td>
</tr>
<tr>
<td>Week 10</td>
<td>3/23</td>
<td><strong>Due:</strong> Longitudinal &amp; Transverse Sections, Detailed Wall Section Development of Elevations(4) with consideration of materials and scale</td>
</tr>
<tr>
<td>Week 11</td>
<td>3/30</td>
<td><strong>Due:</strong> Elevations(4) 3-D generations</td>
</tr>
<tr>
<td>Week 12</td>
<td>April/06</td>
<td><strong>Due:</strong> Schematic Design Model 2</td>
</tr>
<tr>
<td>Week 13</td>
<td>4/13</td>
<td>Final Compaction of Semester Project and Review</td>
</tr>
<tr>
<td>Week 14</td>
<td>4/20</td>
<td>All drawings due for final grade!!!!!!!! Portfolio and Interviews</td>
</tr>
<tr>
<td>Week 15</td>
<td>4/28</td>
<td>Presentation on Tuesday 1:30PM (Professional Attire) Due: Final Drawings, All Models &amp; Portfolio Have a Happy Healthy safe Summer!</td>
</tr>
</tbody>
</table>
In order to assure that you have read over this entire document you are required to sign the Statement of Agreement on the final page of the syllabus and return it at the start of second class period. This will be our contract that you have read over the entire syllabus and that you understand what is expected of you in this class.

STATEMENT OF AGREEMENT
I have read the Course Syllabus for **ARCH 2266 DESIGN IV** for the Spring 2020, including the Class Lecture and Event Schedule, and agree to abide by the conditions for the class as spelled out in this document as well as criteria required and specified by NAAB:

A.2

__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

and

A.4

__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

I also understand know that I must have a working laptop to work only in class. There will be NO going to the lab to do class work unless authorized by the instructor. My signature indicates my personal commitment to meeting the course objectives and succeeding in this educational endeavor.

________________________________________
Signature-Student

Student name (Please print neatly) Student ID # Date

________________________________________
Signature-Instructor

Instructors name Date

ARCH 2266
PRAIRIE VIEW A&M UNIVERSITY

DESIGN IV
Spring 2020

COURSE SYLLABUS
SCHOOL OF ARCHITECTURE