PRAIRIE VIEW A&M UNIVERSITY

SYLLABUS

Course Title:	**Building Information Modeling**		
Course Prefix:	**ARCH**	**Course No.:** **4743**	**Section No.:** **P01**

School of Architecture	Department: Architecture ☑ Construction Science ☐ Art ☐ Digital Media Art ☐ Community Development ☐
Course Location:	Nathelyne Archie Kennedy Building, Room 116
Class Meeting Days & Times:	R 6:00-8:50 PM
Catalog Description:	"(2-2) Credit 3 semester hours. The organization, development and preparation of a complete set of working drawings using computer aided design."
Prerequisites:	N/A
Co-requisites:	
Mode of Instruction:	▪**Face-to-face ☐ On-line ☐ Hybrid**
Instructor:	Rania Labib Assistant Professor
Office Location:	School of Architecture, Prairie View A&M University, Room (TBA)
Office Telephone:	TBA
Fax:	TBA
Email Address:	ralabib@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:	Monday, Tuesday, Wednesday and Thursday 10:30 AM -1:00 PM. Students are advised to make appointments with the professor ahead of time and be specific with the subject matter to be discussed. Students must be prepared for their appointment by bring all applicable materials and information to the meeting.
Virtual Office Hours:	
Learning Resources	**PVAMU Library**: Telephone: (936) 261-1500; web: 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

	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 offer time to 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 a student's overall writing skills. They do NOT proofread or edit for students, but instead teach proofreading and editing techniques. Their goal is to: make a better writer for the long term.
	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 8 am to 5 pm. Email: AEtutoring@pvamu.edu Open to **all** undergraduate students enrolled for credit in targeted PVAMU courses. offers help for: ▪ Microeconomics, Macroeconomics ▪ Management Information Systems ▪ History, Government ▪ Statistics, Basics – Calculus II ▪ Psychology, Sociology ▪ English (Basics – Freshman Comp II), Speech ▪ Spanish I&II ▪ Biology (Pre-Med, Pre-Nursing) ▪ Chemistry (Bio & Nursing Majors) ▪ Physics ▪ Materials & Science

Course Goals and 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/Learning Objectives

At the end of this course, the students will

4743.1	Be able to model buildings in BIM environments
4743.2	Be able to utilize BIM tools to communicate design ideas
4743.3	Be able to utilize BIM tools to render and present geometric models
2223.4	Be able to produce a set of construction documents using Revit

Course Requirements & Evaluation Methods

N/A

- ▪ **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

Instrument	Value (points or percentages)	Total
Assignments	4 to 8 assignment	**30**

Attendance and in-class exercises	_10_ exercises at _2_ points each	30
Projects	__ 2 projects at 20 points each	40
Total:		**100**
Additional Credit/Bonus (TBA)		**10**
Total:		**110**
Grade Determination:	A = 90-100 points B = 80–89 points C = 70–79 points D = 60–69 points; F = 59 points or below	

Course Procedures

Taskstream	Taskstream is a tool that Prairie View A&M University uses for assessment purposes. One of your assignments may be considered an "artifact," an item of coursework that serves as evidence that course objectives are met. More information will be provided during the semester, but for general information, you can visit Taskstream via the link in eCourses
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	As a student in a professional practice course at Prairie View A&M University you are expected to attend each class. Class attendance is recorded on roll sheets that are circulated to record <u>your</u> name and signature. Participation and absences are accumulated beginning with the first day of class on **August 27,** 2018. 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 an 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. <u>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. There will be NO exceptions to this rule. 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. After that, the involvement grade stands.</u> If you have another reason other than these seven for being absent, you may submit a memorandum with supporting documentation requesting that the absence be removed from you record for ONE WEEK AFTER THE ABSENCE HAS OCCURRED. There will be NO exceptions to this rule. All requests will be reviewed and approved or disapproved based upon the justification that you provide in your memorandum. While other reasons for being absent are rarely approved; it is understood that you might feel that there is a higher priority that requires you to miss class.
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 <u>all students are expected to dress appropriately</u> in accordance with university regulations so that no disruptions in the learning experience will occur.

	2. No hats or caps will be allowed to be worn in the classroom during class sessions. If you elect to wear a hat or cap during the lectures or class discussion, your decision will be respected. However you should also respect the instructor's decision to not award you daily participation points based upon that decision. 3. Dress Code for Presentations: Professional dress is expected for all design and technical presentations in class. Failure to adhere to the guidelines posted by the instructor will result in a deduction of ten percent (10%) from your final presentation score. 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. If your cell phone rings during the lecture or you are texting you are subject to losing all participation point for that class period. 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. 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. Failure to adhere to this rule will result in a "0" for that class period.
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 loss of participation for that class. 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. Failure to maintain the classroom as requested by the instructor will result in a deduction in participation points for all class members for that date of instruction. 4. Lecture Notes and Handouts will be sent to your official university email. Handouts distributed during a class period will not be distributed at any other time. It is the student's responsibility to get a copy form another student or source.
Submission of Assignments:	Assignments are due at the start of the class session. No late work will be accepted without proper documentation. Late work will have a penalty of 10% a day, for example if work is delivered 3 days late a 30% penalty will be applied to the assignment final grade
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 either the Microsoft Word, Rich-Text, or plain text format.
Exam Policy:	N/A

Professional Organizations and Journals

References

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 (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.
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.

Technical Considerations for Online and Web-Assist Courses

Minimum Hardware and Software Requirements	Pentium with Windows XP or PowerMac with OS 9
	    -56K modem or network access
	    -Internet provider with SLIP or PPP
	    -8X or greater CD-ROM
	    -64MB RAM
	    -Hard drive with 40MB available space
	    -15" monitor, 800x600, color or 16 bit
	    -Sound card w/speakers
	    -Microphone and recording software
	    -Keyboard & mouse
	    -Netscape Communicator ver. 4.61 or Microsoft Internet Explorer ver. 5.0 /plug-ins
	    -**Participants should have a basic proficiency of the following computer skills:**
	        ·Sending and receiving email
	        ·A working knowledge of the Internet
	        ·Proficiency in Microsoft Word
	        ·Proficiency in the Acrobat PDF Reader
	        -Basic knowledge of Windows or Mac O.S.

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, usually within 48 hours. Urgent emails should be marked as such. Check regularly for responses. You can send email anytime that is convenient to you, but the instructors will check their email messages continuously during the day throughout the work-week (Monday through Friday) during normal office hours. Instructors should respond to email messages during the work-week by the close of business (5:00 pm) on the day following **their receipt** of them. Emails received on Friday will be responded to by the close of business on the following Monday.

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 and access "2014

NAAB Conditions for Accreditation."					
Performance Criteria.	**Ability** ☑	**Understanding** ☑	**Course Learning Outcomes Competencies (T, R, I)**		
			T Taught	**R** Reinforced	**I** Utilized/ Integrated
REALM A: Critical Thinking and Representation					
A.1. Professional Communication Skills (Ability)			T		
A.2. Design Thinking Skills (Ability)				R	
A.3. Investigative Skills (Ability)				R	
A.4. Architectural Design Skills (Ability)				R	
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					
B.1. Pre-Design (Ability)			T		
B.2. Site Design (Ability)				R	
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 (Understanding)					
B.8. Building Materials and Assemblies (Understanding)					
B.9. Building Service Systems (Understanding)					
B.10. Financial Considerations (Understanding)					
REALM C: Integrated Architectural Solutions					
C.1. Research (Understanding)				R	
C.2. Integrated Evaluations and Decision-Making Design Process (Ability)					
C.3. Integrative Design (Ability)					
REALM D: Professional Practice					
D.1. Stakeholder Roles in Architecture (Understanding)					
D.2. Project Management (Understanding)					
D.3. Business Practices (Understanding)					
D.4. Legal Responsibilities (Understanding)					
D.5. Professional Conduct (Understanding)					

COURSE OUTLINE: EVENT AND LECTURE SCHEDULE

This schedule is subject to change as the semester proceeds in order to cover the most important material in the time allotted. Any revisions will be duly noted and announced in class. All referenced readings are taken from the required text.

	Registration/Assembly Dates		Dates exam scores will be posted
	Key Dates	**1**	Holidays
	Graduation Applications		Guest lectures
	Dates for Exams		Project Team Workshop

16 WEEK CALENDAR

Week One: Topic **January 14-18, 2019**	**Introduction to Revit**	
Chapter (s):		
Assignment (s):		
University Events:	**January 16, 2019 [Wednesday]**	UNDERGRADUATE: LATE REGISTRATION/ADD COURSES FOR SPRING 2019.
	January 18, 2019 [Friday]	UNDERGRADUATE: ADD/DROP COURSES/CHANGE COURSE SCHEDULE ENDS FOR SPRING 2019
Week Two: Topic **January 21-25, 2019**	**Basic Revit commands- session 1**	
Chapter (s):		
Assignment (s):		
University Events:	**January 21, 2019 [Monday]**	**1** MARTIN LUTHER KING DAY (University Closed)
Week Three: Topic **January 28-February 1, 2019**	**Basic Revit commands – session 2**	
Chapter (s):		
Assignment (s):		
University Events:		
	January 30, 2019 [Wednesday]	CENSUS DATE (12TH CLASS DAY): COURSE RESERVATIONS CANCELLED FOR NON-PAYMENT.
		LAST DAY TO WITHDRAW FROM COURSE WITHOUT ACADEMIC RECORD. A FINANCIAL RECORD WILL STILL EXIST.
		SPRING 2019 GRADUATION LATE APPLICATION DEADLINE. There will be NO exceptions to this deadline.
	February 1, 2019 [Thursday]	NOTE! WITHDRAWAL FROM COURSES "WITH ACADEMIC RECORD" (W) BEGINS; ENDS MARCH 29, 2019
Week Four: Topic **February 4-8, 2019**	**Geometric Modeling in Revit**	
Chapter (s):		
Assignment (s):		

University Events: ⚑		
Week Five: Topic **February 11-15, 2019**	**Mid-term project introduction**	
Chapter (s):		
Assignment (s):		
University Events: ⚑	**February 11, 2019 [Monday]**	NOTE! 20TH CLASS DAY
Week Six: Topic **February 18-22, 2019**	**Advanced geometric modeling**	
Chapter (s):		
Assignment (s):		
University Events: ⚑		
Week Seven: Topic **February 25-March 1, 2019**	**Introduction to Revit families**	
Chapter (s):		
Assignment (s):		
University Events: ⚑		
Week Eight: Topic **March 4-8, 2019**	**Mid-term project due**	
Chapter (s):		
Assignment (s):		
University Events: ⚑		
Mid-Term Exam ✎	**March 7-9, 2019 Thursday through Saturday**	
Week Nine: Topic **March 11-15, 2019**	**SPRING BREAK!**	
Chapter (s):		
Assignment (s):		
University Events: ⚑	1️⃣ **UNIVERSITY CLOSED ON MARCH 15, 2019**	
Week Ten: Topic **March 18-22, 2019**	**Introduction to rendering in Revit**	
Chapter (s):		
Assignment (s):		
University Events: ⚑	**March 19, 2019 [Tuesday]**	**60% of term is completed!**
	March 19, 2019 [Tuesday]	📑 **MID-TERM EXAM GRADES DUE BY 11:59 pm**
Week Eleven: Topic **March 25-29, 2019**	**Construction Document production in Revit**	
Chapter (s):		
Assignment (s):		
University Events: ⚑	**March 27, 2019 [Wednesday]**	**Founders Day/Honor Convocation** **LAST DAY TO APPLY FOR SPRING 2019 GRDUATION (TO PARTICIPATE IN THE CEREMONY)**
	March 29, 2019 [Friday]	NOTE! **WITHDRAW FROM COURSE "WITH RECORD ("W") ENDS.**
Week Twelve: Topic		

April 1-5, 2019		
Chapter (s):	**Scheduling in Revit**	
Assignment (s):		
University Events:	March 31–April 2, 2019	**Provost Program Review: MCD in Community Development**
Week Thirteen: Topic **April 8-12, 2019**	**Final project introduction**	
Chapter (s):		
Assignment (s):		
University Events:	**April 8, 2019 [Monday]**	NOTE! PRIORITY REGISTRATION BEGINS FOR FALL 2019 SEMESTER.
Week Fourteen: Topic **April 15-19, 2019**	**Work on final project**	
Chapter (s):		
Assignment (s):		
University Events:	**April 14–16, 2019**	**Provost Program Review: BS in Construction Science**
	April 19, 2019 [Friday]	**1** **Good Friday [Student holiday]**
Week Fifteen Topic **April 22-26, 2019**	**Final project draft**	
Chapter (s):		
Assignment (s):		
University Events:	**April 21-23, 2019**	**Provost Program Review: BS in Digital Media Arts**
Week Sixteen **April 29-May 3, 2019**	**Final project**	
	April 29,2019 (Monday)	**COURSE REVIEW DAY (Classes must convene and instructors will prepare students for Final Exams)**
	April 30, 2019 (Tuesday)	**COURSE REVIEW DAY (Classes must convene and instructors will prepare students for Final Exams)** LAST DAY OF CLASSES FOR SPRING SEMESTER 2019 **LAST DAY TO WITHDRAW FROM UNIVERISTIY FOR SPRING 2019 SEMESTER.**
	May 1-7, 2019 [Wednesday-Tuesday]	**FINAL EXAMINATION PERIOD**
	May 9, 2019 [Thursday]	**FINAL GRADES DUE FOR GRADUATING CANDIDATES BY NOON**
	May 11, 2019 [Saturday]	**COMMENCEMENT**
	May 14, 2019 [Tuesday]	**FINAL GRADES DUE FOR ALL STUDENTS**

STATEMENT OF AGREEMENT
I have read the Course Syllabus for **ARCH 4743** for the Spring Semester 2019, including the Class Lecture and Event Schedule, and agree to abide by the conditions for the class as spelled out in this document. 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

RETURN THIS PAGE FROM THE SYLLABUS TO THE INSTRUCTOR TO COMPLETE YOUR ENROLLMENT IN THIS COURSE.

▭ **RECEIVED WITH STUDENT'S SIGNATURE: _____**

☑ **ENTERED INTO GRADE BOOK**: _____