

Advanced Computer Aided Design



SYLLABUS

				aca Boolgii					
Course Prefix:	AR	CH	Course No.:	4373	Section No.:	Y01-Y81			
Computational Design will change the way you work: you can explore multiple design options; get under the hood and access your data; automate repetitive tasks; test what your design is REALLY doing; and think algorithmically.									
		Department:	☑ Architecture	9					
School of	f		□ Constructio						
			□ Art						
Architectu	re		□ Digital Med	ia Art					
		☐ Community Development							
Class Meeting Da	ays,	Tuesday; 6 -	8:50 PM and 9	- 10:50 PM					
Times, Location:		Nathelyne Ar	chie Kennedy E	Building, Computer	Lab, Room 223				
Catalog Descript	ion:	(2-2) Credit 3	semester hour	S.					
Prerequisites:									
Co-requisites:									
Mode of		□ Face-to-f	ace □ On-line	a 🖾 Hybrid					
Instruction:		□ i ace-io-i		e <u>e</u> riybiid					
Instructor:		Mehdi Azizl	khani, PhD, LE	ED AP					
Office Location:		School of A	rchitecture, Pr	airie View A&M U	niversity				
		Office #244							
Office Telephone	:	(936) 261-98	00						
Email Address:		mnazizkhan	i@pvamu.edu						
U.S. Postal Servi Address:	ce	Prairie View P.O. Box 519 Mail Stop 21 Prairie View,	00						
Office Hours:		Students are specific with appointment prior to the m	the subject r by having all a neeting.	ake appointments natter to be discu	ssed. Students m	head of time and be ust prepare for their nitted to the instructor			
Virtual Office Ho	urs:	By Appointm	ent						
Required Text:									
Optional Text:			Primer 3 rd Edit						
Recommended		Essentials of	Mathematics fo	or Computational De	esign 4 th Edition				
Text/Readings:									
Course Goa	Is an	d Overvi	ew:						
		modeling, pa the associat knowledge a	rametric desigr ed benefits. V nd skills, not ju Dimensions to	n, and computation Ve will use Advar st for two-dimension	in the process of de- nced CAD software nal or three-dimension	n of Advanced CAD sign/construction and to build upon our onal modeling, but for including parametric			

Course Outcomes/Learning Objectives:

At the end of this course, the students will:

No.	Learning Objectives	Core Curriculum Outcome Alignment
4373.1	Demonstrate parametric modeling processes and their applications	4B, 5A – ACCE8
4373.2	Apply parametric modeling strategies to a design and construction project	5F – ACCE8
4373.3	Use parametric tools to assess integration of building form components	4B, 5A – ACCE8
4373.4	Use parametric design tools for design optimization	5A – ACCE8
4373.5	Apply 3D modeling strategies to create static and dynamic models	4B – ACCE8

Course Requirements & Evaluation Methods

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

- Assignments/Papers/Exercises: Written assignments designed to supplement and reinforce course material
- Quiz: Written tests designed to measure knowledge of presented course material
- Projects: Assignments designed to measure ability to apply presented course material
- Class Attendance/Participation: For online classes this is your weekly login and dedication for complete work submission on-time. For Hybrid classes this expands to include also your class attendance/participation in Face2Face class sessions.

Grading Matrix: Note that students can interact with each other on the assignments for an improved learning experience. However, each student should complete and submit the assignments/projects individually.

Instrument	Value (points or percentages)	Total				
Assignments	Class assignments	30%				
Papers		0				
Exercises		0				
Exams		0				
Projects	2 projects at 30% each	60%				
Mid Term Exam		0				
Class Attendance/Participation		10%				
Final Exam		0				
Total:		100%				
Additional Credit/Bonus						
Total:		100%				
Grade Determination:	B = 80–89 points C = 70–79 points D = 60–69 points; F = 59 points or below If a student has stopped attending the office of the first day of class but did not office of the first day of class day of class but did not office of the first day of class but did not office of the first day of c	A = 90-100 points B = 80-89 points C = 70-79 points D = 60-69 points; F = 59 points or below If a student has stopped attending the course (i.e. "stopped out") at any point after the first day of class but did not officially withdraw from the course and has missed assignments and exams and performed below the grade level of a D, a grade of FN (failed non-attendance) will be assigned for the final course grade to ensure compliance with the federal Title IV financial aid regulations. In contrast, if the student has completed all assignments and exams, but performed below the grade level of a D, a grade of F will be assigned for the				
Grade Grubbing:	'Grade grubbing' is a new term that has come about due to students bothering, harassing, or pestering their instructors over grades when the fault for performance lies with the student. This sort of behavior has no place in this institution of higher learning. Forcing instructors to compromise their ethics with threatening requests or any requests to inflate grades is an unfair responsibility					

placed on the instructor and a poor reflection on the student. This behavior is rude, offensive and wastes the instructor's time.

Examples:

- "Rounding up my grade will help my GPA."
- "I need a passing grade to keep my scholarship."
- "I need a passing grade to get off of academic probation/suspension."
- "Can you give me a few points to get a higher grade?"
- "I understand that you don't accept late work, but I did the assignment or my part of the group project, can you please make an exception?"
- "I know you do not offer extra credit, but can I write an essay to bring up my grade?"
- "I misunderstood the instructions. Can I still turn in my assignment late?"
- "I was wondering if there is anything I can do to bring up my grade, I am so close to an A."
- "I need a passing grade to graduate/get into medical school."
- "My grade should be rounded up because I worked hard, came to every class, and never missed assignments."
- "If I do not get a passing grade, I will be in trouble with my parents."

Wearing down the instructor by arguing, begging, and pleading to possess academic expectations without taking personal responsibility is harassment, disrespectful, and inappropriate and will be reported to the Office of Student Conduct.

Course Procedures:

CANVAS

CANVAS 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.

Class Attendance Policy (See Catalog for Full Attendance Policy)

Prairie View A&M University requires regular class attendance. Attending all classes supports the full academic development of each learner, whether classes are taught with the instructor physically present or via distance learning technologies such as interactive video and/or the internet. Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in the assignment of a grade of "F". Absences are accumulated beginning with the first day of class during regular semesters and summer terms. Each faculty member will include the University's attendance policy in each course syllabus.

Participation and absences are accumulated beginning with the first day of class on January 16, 2024. If you do not attend the class, you may assume that you have received zero (0) points for the class period unless you have a university-approved excuse.

*Attendance Reporting Period: January 16 - 24 (Show (SH) / No Show (NS)). Students who do not attend classes during this period by January 24, will be marked as a no show (NS) in Panthertracks, have the course removed, and financial aid reduced or cancelled!

If you are not able to attend class during the Attendance Reporting Period, you must contact your professor immediately with an explanation via email before noon on January 24.

Makeup Work for Legitimate Absences

Prairie View A&M University recognizes that there are a variety of legitimate circumstances in which students will miss coursework and that accommodations for makeup work will be made. If a student's absence is excused, the instructor must either provide the student an opportunity to make up any quiz, exam, or other work contributing to the final grade or provide a satisfactory alternative by a date agreed upon by the student and instructor.

Students are encouraged to work with instructors to complete makeup work before known scheduled absences (University-sponsored events, administrative proceedings, etc.). Students are responsible for planning their schedules to avoid excessive conflicts with course requirements.

Excused absences are in one of the following classifications:

- 1. Participation in an activity appearing on the University authorized activity list from the athletics coach, band director, organization advisors, etc.
- 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 to the Dean of Students/Office of Student Conduct using the *Request for a University Excused Absence form.* See **Absence Verification Process** in the syllabus.

The excuse/s will be accepted after your professor receives the authorized university excuse letter. There will be NO exceptions to this rule. Email documents from students will not be accepted to clear these absences.

In accepting your decision to miss class, you must also be willing to accept the instructor's decision not to award you involvement points for the class or classes that are missed.

Do not wait until the last minute to complete your assigned tasks. Sending requests for assistance at the last minute will not guarantee a quick response from the instructor.

All work must be turned in before or on the due dates noted in the syllabi and/or documents issued by the instructor.

Extensions/makeups will only be granted with proof of officially documented emergencies. You must provide documentation within the week the assigned tasks are due. It is your responsibility to make sure that you can access CANVAS and all digital requirements. Extensions will not be granted due to procrastination, forgetfulness, not following directions, or not purchasing access to required programs/software.

If you are having trouble with CANVAS, contact CIITS at 936-261-3283 or send an email to <u>ciits@pvamu.edu</u> or submit a trouble ticket to <u>CIITS Troubletickets.</u> Any issues with (*add name of your required programs/software), call (800) 123-4567 (request an email confirmation with your case number if you make a phone call).

Always provide documentation with a timestamp to the instructor as proof of the technical issues with your account when the assigned tasks were available.

Absence Verification Process

All non-athletic absences (e.g., Medical, Death/Funeral, Court/Legal-related, etc.) for which a student seeks to obtain a valid excuse must be submitted to the Dean of Students/Office of Student Conduct, with supporting documentation, for review and verification. Please use the <u>Online Reporting Forms</u> to access/complete/submit the *Request for a University Excused Absence* form for an excuse. Upon receipt, a staff member will verify the documentation and provide an official university excuse, if applicable. The student is responsible for providing the official university excuse issued by the Office for Student Conduct to the professor(s). Questions should be directed to the Dean of Students via

	email: <u>deanofstudents@pvamu.edu</u> or phone: (936) 261-3550 or Office for Student Conduct via email: <u>studentconduct@pvamu.edu</u> or phone: (936) 261-3524
Porsonal Conduct	Requests for a university excused absence after the last day of classes will be denied.
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 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. Students should not be eating food or consuming drinks during the discussion sessions. 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
	and other non-class related activities are not allowed at any time.
Conduct of the	7. Harassment of your fellow students of any kind will not be tolerated.
Class	Please note the following rules for the conduct of the class. 1. Class will begin at the appointed time.
	 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 presentation or discussion board before the class is dismissed without prior approval from the instructor will result in a loss of participation for that class. Lecture Notes and Handouts will be posted on Canvas or 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.
Formatting	Microsoft Word is the standard word processing tool used at PVAMU. If you are using
Documents:	other word processors, be sure to save the document in either the Microsoft Word, Rich-
Exam Policy:	Text, or plain text format. Exams and quizzes will be announced online via Canvas as scheduled. Exams
Exam Policy:	should be taken as scheduled. No makeup examinations will be allowed except under documented emergencies (See Student Handbook).
Professional Orga	anizations and Journals: N/A
References: N/A	
	es and Procedures:
Disability Statement	Students with disabilities, including learning disabilities, who wish to request
(See Student Handbook):	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

Academic Misconduct:	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. Accommodation letters are accepted only through the university's Office of Disability Services Accommodate Portal. It is the responsibility of the student to make sure that the instructor receives and acknolwges accommodation letters. Academic dishonesty is defined as any form of cheating or dishonesty that has the effect or intent of interfering with any academic exercise or fair evaluation of a student's performance. The college faculty can provide additional information, particularly related to a specific course, laboratory, or assignment.
	You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with the <i>University Administrative Guidelines on Academic Integrity</i> , which can be found on the <u>Academic Integrity webpage</u> . Students who engage in academic misconduct are subject to university disciplinary procedures. As listed in the <i>University Administrative Guidelines on Academic Integrity</i> , the University Online Catalog, and the Student Code of Conduct, the following are examples of prohibited conduct. This list is not designed to be all-inclusive or exhaustive. In addition to academic sanctions, any student found to have committed academic misconduct that is also a violation of criminal law may also be subject to disciplinary review and action by the Office of Student Conduct (as outlined in the Student Code of Conduct).
Forms Of Academic Dishonesty:	 Cheating: Deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not learned, giving or receiving aid unauthorized by the instructor on assignments or examinations. Examples: unauthorized use of notes for a test; using a "cheat sheet" on a quiz or exam; any alteration made on a graded test or exam which is then resubmitted to the teacher; Plagiarism: Careless or deliberate use of the work or the ideas of another; representation of another's work, words, ideas, or data as your own without permission or appropriate acknowledgment. Examples: copying another's paper or answers, failure to identify information or essays from the internet and submitting or representing it as your own; submitting an assignment which has been partially or wholly done by another and claiming it as yours; not properly acknowledging a source which has been summarized or paraphrased in your work; failure to acknowledge the use of another's words with quotation marks; Collusion: When more than one student or person contributes to a piece of work that is submitted as the work of an individual; Conspiracy: Agreeing with one or more persons to commit an act of academic/scholastic dishonesty; and Multiple Submission: Submission of work from one course to satisfy a requirement in another course without explicit permission. Example: using a paper prepared and graded for credit in one course to fulfill a requirement and receive credit in a different course.
Nonacademic Misconduct:	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 ability 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. The Office of Student Conduct will adjudicate such incidents under nonacademic procedures.

PVAMU's General Statement on the Use of Generative Artificial Intelligence Tools in the Classroom	Generative Artificial Intelligence (GAI), specifically foundational models that can create writing, computer code, and/or images using minimal human prompting, are increasingly becoming pervasive. Even though ChatGPT is one of the most well-known GAIs currently available, this statement includes any and all past, current, and future generations of GAI software. Prairie View A&M University expects that all work produced for a grade in any course, be it face-to-face or virtual, will be the sole product of a student's endeavors to meet those academic goals. However, should an instructor permit their students to use artificial intelligence as a resource or tool, students must not substitute the substance of their original work with the results of using such GAI tools. This clearly violates the University's Administrative Guidelines on Academic Integrity and its underlying academic values.
Sexual Misconduct	Sexual harassment of students and employees at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating the university's sexual harassment policy will be subject to disciplinary action. In accordance with the Texas A&M University System guidelines, your instructor is obligated to report to the Office of Title IX Compliance (titleixteam@pvamu.edu) any instance of sexual misconduct involving a student, which includes sexual assault, stalking, dating violence, domestic violence, and sexual harassment, about which the instructor becomes aware during this course through writing, discussion, or personal disclosure. The faculty and staff of PVAMU actively strive to provide a learning, working, and living environment that promotes respect that is free from sexual misconduct, discrimination, and all forms of violence. If students, faculty, or staff would like assistance or have questions, they may contact the Title IX Coordinator at 936-261-2144 or titleixteam@pvamu.edu. More information can be found at www.pvamu.edu/titleix , including confidential resources available on campus.
Protections and	The U.S. Department of Education's Office for Civil Rights (OCR) enforces, among other
Accommodations	statutes, Title IX of the Education Amendments of 1972. Title IX protects people from
for Pregnant and Parenting Students	discrimination based on sex, sexual orientation, and gender identity in education programs or activities that receive federal financial assistance. This protection includes those who
Non-Discrimination	may be pregnant and parenting. Title IX states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Students seeking accommodations related to pregnancy or parenting should contact the Office of Title IX for information, resources, and support at titleixteam@pvamu.edu . Additional information and/or support may be provided by the Office of Disability Services or the Office of the Dean of Students Prairie View A&M University does not discriminate on the basis of race, color, sex, religion,
Statement	national origin, age, disability, genetic information, veteran status, sexual orientation, or
	gender identity in its programs and activities. The University is committed to supporting students and complying with The Texas A&M University System non-discrimination policy. It seeks to establish an environment that is free of bias, discrimination, and harassment. If you experience an incident of discrimination or harassment, we encourage you to report it. If you would like to speak with someone who may be able to afford you privacy or confidentiality, there are individuals who can meet with you. The Director of Equal Opportunity & Diversity has been designated to handle inquiries regarding the non-discrimination policies and can be reached at Harrington Science Building, Suite 109 or by phone at 936-261-1744 or 1792.
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 University Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.
	If the recorded grades were entered mistakenly, the student must address the error to the instructor to correct the error.

If the student believes that the faculty's grading was inappropriate in view of the standards and procedures outlined in the syllabus, the student must follow protocol by doing the following:

- 1. Fill out the Student-Informal Grade Appeal Form with supporting documentation and submit to the Faculty Member and Department Chair/Head to initiate the informal appeal process.
- 2. If the student does not accept the results of the Faculty Member Informal Grade Appeal Response from the instructor, the student must fill out the Student Formal Grade Appeal Form (link to form) and submit with documentation to the School of Architecture Grade Appeals Committee appointed by the Dean.
- 3. If the student does not accept the results of the School of Architecture Grade Appeals Committee, the forms and documentations will be forwarded to the School of Architecture Associate Dean.
- 4. If the student does not accept the results of the Associate Dean, the forms and documentation will be forwarded to the School of Architecture Dean.
- 5. If the student does not accept the results of the School of Architecture Dean, student must fill out a Grade Appeal to the university.

Student Suppor	t and Success:
John B. Coleman	John B. Coleman Library
Library	The John B. Coleman Library's mission is to enhance the scholarly pursuit of knowledge, to foster intellectual curiosity, and to promote life-long learning and research through our innovative services, resources, and cultural programs, which support the Prairie View A&M University's global mission of teaching, service, and research. It maintains library collections and access both on campus, online, and through local agreements to further the educational goals of students and faculty. Website: https://www.pvamu.edu/library/ ; Phone: 936-261-1500
Academic Advising	Academic Advising Services offers students various services that contribute to student
Services	success and lead toward graduation. We assist students with understanding university policies and procedures that affect academic progress. We support the early alert program to help students connect to success early in the semester. We help refer students to the appropriate academic support services when they are unsure of the best resource for their needs. Faculty advisors support some students in their respective colleges. Your faculty advisor can be identified in PantherTracks. Advisors within Academic Advising Services are available to all students. We are located across campus. Find your advisor's location by academic major on the <u>advising website</u> . Phone: 936-261-5911
The University	The University Tutoring Center (UTC) offers free tutoring and academic support to all
Tutoring Center	registered PVAMU students. The mission of the UTC is to help provide a solid academic foundation that enables students to become confident, capable, independent learners. Competent and caring staff and peer tutors guide students in identifying, acquiring, and enhancing the knowledge, skills, and attitudes needed to reach their desired goals. Tutoring and academic support are offered face-to-face in the UTC and virtually in online sessions. Other support services available for students include Supplemental Instruction, Study Breaks, Academic Success Workshops, and Algebra Study Jam. Location: J. B. Coleman Library, Rm. 307; Phone: 936-261-1561; Email: pvtutoring@pvamu.edu ; University Tutoring Website
Writing Center	The Writing Center provides well-trained peer tutors to assist students with writing assignments at any stage of the writing process. Tutors help students with various writing tasks from understanding assignments, brainstorming, drafting, revising, editing, researching, and integrating sources. Students have free access to Grammarly online writing assistance. Grammarly is an automated proofreading and plagiarism detection tool. Students must register for Grammarly by using their student email address. In addition, students have access to face-to-face and virtual tutoring services either asynchronously via email or synchronously via Zoom. Location: J. B. Coleman Library, Rm. 209; Phone: 936-261-3724; Writing Center Website, Grammarly Registration

Panther Navigate	Panther Navigate is a proactive system of communication and collaboration between
	faculty, academic advisors, and students that is designed to support student success by
	promptly identifying issues and allowing for intervention. Panther Navigate helps students
	by providing a central location to schedule advising appointments, view campus resources,
	and request assistance. Students who recognize that they have a problem that negatively
	affects their academic performance or ability to continue school may self-refer an
	academic early alert. To do so, students will log in to Canvas and click on Student Alerts
	on the left sidebar within a course. Students also have the option to download the Navigate
Student Counseling	Student app. Phone: 936-261-5902; Panther Navigate Website The Student Counseling Services unit offers a range of services and programs to assist
Services	students in maximizing their potential for success: short-term individual, couples, and
	group counseling, as well as crisis intervention, outreach, consultation, and referral
	services. The staff is licensed by the State of Texas and assists students who are dealing
	with academic skills concerns, situational crises, adjustment problems, and emotional
	difficulties. Information shared with the staff is treated confidentially and in accordance with
	Texas State Law. Location: Hobart Taylor, 2nd floor; Phone: 936-261-3564; Website:
	https://www.pvamu.edu/healthservices/student-counseling-services/
Office of Testing	The Office of Testing Services serves to facilitate and protect the administration of
Services	educational and professional exams to aid students, faculty, staff, and the community in
	their academic and career goals. We provide proctoring services for individuals who need
	to take exams for distance or correspondence courses for another institution, exams for
	independent study courses, or make-up exams. In order for a proctored exam to be
	administered by our office, the instructor of the course must first submit the online PVAMU Testing Services – Test Proctoring Form (this form can only be completed by the
	instructor) to the Office of Testing Services 72 hours prior to the first exam being
	administered. Once the Test Proctoring Form has been submitted, the instructor will inform
	their testers so they can then register for an appointment with our office on one of the
	selected proctored exam test dates within the testing window for the exam and pay the
	applicable fees. To access the OTS – Test Proctoring Form, to schedule a proctored exam
	appointment, or to find more information about our proctoring services, please visit the
	OTS – Proctoring Service website. Location: Wilhelmina Delco, 3 rd Floor, Rm. 305; Phone:
	936-261-3627; Email: aetesting@pvamu.edu; Testing Website
Office of Diagnostic	The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that
Testing and	provides comprehensive civil rights protection for persons with disabilities. Among other
Disability Services	things, this legislation requires that all students with disabilities be guaranteed a learning
	environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, contact the Office of Disability Services.
	As a federally-mandated educational support unit, the Office of Disability Services serves
	as the repository for confidential disability files for faculty, staff, and students. For persons
	with a disability, the Office develops individualized ADA letters of request for
	accommodations. Other services include learning style inventories, awareness workshops,
	accessibility pathways, webinars, computer laboratory with adapted hard and software,
	adapted furniture, proctoring non-standardized test administrations, ASL interpreters,
	ALDs, digital recorders, Livescribe, and a comprehensive referral network across campus
	and the broader community. Location: Hobart Taylor, Rm. 1D128; Phone: 936-261-3583;
Center for	<u>Disability Services Website</u> Distance Learning, also referred to as Distance Education, is the employment of
Instructional	alternative instructional delivery methods to extend programs and services to persons
Innovation and	unable to attend classes in the traditional manner. CIITS supports student learning through
Technology	online, hybrid, web-assist, and 2-way video course delivery. For more details and contact
Services (CIITS)	information, visit <u>CIITS Student Website</u> . Phone: 936-261-3283 or email:
	ciits@pvamu.edu.
Veteran Affairs	Veterans Services works with student veterans, current military and military dependents to
	support their transition to the college environment and continued persistence to
	graduation. The Office coordinates and certifies benefits for both the G.I. Bill and the
	Texas Hazlewood Act. Location: Evans Hall, Rm. 102; Phone: 936-261-3563; Website:

	https://www.pvamu.edu/sa/departments/veteranaffairs/
Office for Student Engagement	The Office for Student Engagement delivers comprehensive programs and services designed to meet the co-curricular needs of students. The Office implements inclusive and accessible programs and services that enhance student development through exposure to and participation in diverse and relevant social, cultural, intellectual, recreational, community service, leadership development, and campus governance. Location: Memorial Student Center, Rm. 221; Phone: 936-261-1340; Website: https://www.pvamu.edu/studentengagement/
Center for Careers &	This center supports students through professional development, career readiness, and
Professional	placement and employment assistance. The center provides one-on-one career coaching,
Development	interview preparation, resume and letter writing, and career exploration workshops and seminars. Services are provided for students at the Northwest Houston Center and
	College of Nursing in the Medical Center twice a month or on a requested basis. Distance
	Learning students are encouraged to visit the center website for information regarding
	services provided. Location: Anderson Hall, 2 nd floor; Phone: 936-261-3570; Center for
	Careers & Professional Development Website
COVID-19 Campus	In accordance with the latest guidelines from the PVAMU Health Services, the following
Safety Measures	measures are in effect until further notice.
	 Students who are ill will be asked to adhere to best practices in public health, such as masking, handwashing, and social distancing, to help reduce the spread of illness across campus.
	 Mandatory self-reporting will no longer be required by students. Students will be responsible for communicating with their professors regarding COVID, similarly to any other illness.
	 There will be no mandatory isolation. Students who are too ill to engage in classroom activities will be responsible for securing the appropriate documentation to support the absence.
	 Students who self-isolate will be responsible for communicating with their professors and securing an excuse from Student Conduct.
	 All students will have access to <u>TimelyCare</u>, a telehealth platform that provides virtual medical care 24/7 and by appointment in the Student Health Clinic. Students are encouraged to enroll with TimelyCare at the beginning of the semester, at timelycare.com/pvamu.
	 Students will have access to COVID testing in the Student Health Clinic by appointment. Testing is for students who are symptomatic ONLY.
Technical Cons	iderations for Online and Web-Assist Courses:

Technical Considerations for Online and Web-Assist Courses:

Technical Considerations

Minimum Recommended Hardware and Software:

- Intel PC or laptop with Windows 10 or later version; Mac with OS Catalina
- Smartphone or iPad/tablet with wi-fi*
- High-speed internet access
- 8 GB memory
- Hard drive with 320 GB storage space
- 15" monitor, 1024 x 768, color
- Speakers (internal or external)
- Microphone and recording software
- Keyboard & mouse
- Most current version of Google Chrome, Safari, or Firefox

Due to the digital nature of this course, students must make sure they have a Working Laptop to learn/practice the course materials during and after class hours. You also need to download the Rhino Software (for free) from the Rhino website. Instructions/links are provided in the first module session of the course. The software is free to use for 90 days. After 90 days you can still use it, but you will not be able to save the files unless you purchase the software. You can purchase Rhino at a student price, but if you do not want to purchase the software the suggestion is to install Rhino in the second

	week of class to cover your semester's work. If this is the case, inform the instructor in advance.
	* Some courses may require remote proctoring. At this time only Chromebooks, laptops, and desktops running Windows or Mac work with our proctoring solution, but iPads are not compatible. Most other applications will work with Android or Apple tablets and smartphones.
	Note: Be sure to enable Java & pop-ups in the web browser preferences
	Participants should have a basic proficiency of the following computer skills: Sending and receiving email A working knowledge of the Internet Microsoft Word (or a program convertible to Word) Acrobat PDF Reader Windows or Mac OS Video conferencing software (Zoom)
Netiquette (online etiquette):	Students are expected to participate in all discussions and virtual classroom chats as directed. Students are to be respectful and courteous to others on discussions boards. Foul or abusive language will not be tolerated. Do not use ALL CAPS for communicating to others AS IT CAN BE INTERPRETED AS YELLING. Avoid slang terms such as "wassup?" and texting abbreviations such as "u" instead of "you." Limit and possibly avoid the use of emoticons. Be cautious when using humor or sarcasm as tone is sometimes lost in an email or discussion post and the message might be taken seriously or sound offensive.
Video Conferencing Etiquette	When using Zoom, WebEx, or other video conferencing tools, confirm the visible area is tidy, clear of background clutter, inappropriate or offensive posters, and other distractions. Ensure you dress appropriately and avoid using high traffic or noisy areas. Stay muted when you are not speaking and avoid eating/drinking during the session. Before the class session begins, test audio, video, and lighting to alleviate technology issues.
Communication Expectations and Standards	Emails or discussion postings will receive a response from the instructor, usually in less than 48 hours. Urgent emails should be marked as such. Check regularly for responses.
Discussion Requirement	Online courses often require minimal to no face-to-face meetings. However, conversations about the readings, lectures, materials, and other aspects of the course can occur in a seminar fashion. The use of the discussion board will accomplish this. The instructor will determine the exact use of discussion boards.
	It is strongly suggested that students type their discussion postings in a word processing application such as Word 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, copy and paste to the discussion board.
Technical Support:	Students should go to the <u>Password Reset Tool</u> if they have password issues. The page will provide instructions for resetting passwords and contact information if login issues persist. For other technical questions regarding eCourses, call the Center for Instructional Innovation and Technology Services (CIITS) at 936-261-3283 or email <u>ciits@pvamu.edu</u> .
Submission of Assignments-On Line:	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.
	ASSIGNMENTS are due at the start of the class session. No late work will be accepted

without proper documentation. **DUE DATES:** Be sure to check the due dates on the assignment and schedule

documents for each module. The due date is posted along with the assignment description.

SUBMISSION METHOD: You should upload your assignments through Canvas following the descriptions for each assignment and based on the required file format. **DO NOT** email your completed assignment or files to the instructor as attachments unless you are asked to do so. Students must include their first name and last name in their submitted assignment files on CANVAS. Assignments submitted without paying attention to this requirement will lose points accordingly.

Grade and Evaluation

Grades for assignments, submissions and exams will be posted within five (5) business days from the due date. You will be notified if those circumstances change. Responses will usually provide a grade and feedback as well.



Emails will be responded via email within 24 hours Monday-Friday before 5:00 PM. There will not be a response to emails asking about the class discussion (check your weekly schedule).

Please send all correspondences to the instructor's Canvas' portal. Do not send any course materials, assignments, questions or any email(s) to the instructor's PV's webmail Outlook account. This method will allow the instructor to track you and all correspondences to better serve your needs in a timely manner.

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 and obtain guidance, go to the NAAB website, www.naab.org and access "NAAB 2020 Conditions for Accreditation."

Performance Criteria:	Skill ☑	Understanding ☑	Course Learning Outcomes Competencies (T, R, I)		
			Т	R	I
			Taught	Reinforced	Utilized/
OTUDENT ODITEDIA 4. Haalik Oafata ay J.Walfaya	in the F		(/ 1 1	 	Integrated
STUDENT CRITERIA 1: Health, Safety and Welfare	in the E	Sulit Environme	ent (Und	ierstanding	Levei)
1.A. Impact of Built Environment on Human Health (Understanding)					
1.B. Impact of Built Environment on Safety (Understanding)					
1.C. Impact of Built Environment on Welfare at Multiple Scales,					
from building to cities (Understanding)					
STUDENT CRITERIA 2: Professional Practice (Und	lerstand	ling Level)			
2.A. Professional Ethics (Understanding)					
2.B. Regulatory Requirements (<i>Understanding</i>)					
2.C. Fundamental business processes (Understanding)					
2.D. Forces influencing change on 2.A, 2.B, 2.C (Understanding)					
STUDENT CRITERIA 3: Regulatory Context (Under	standin	g Level)			
3.A. Life Safety (Understanding)					
3.B. Land Use (Understanding)					
3.C. Current Laws and Regulations (Understanding)					
3.D. Evaluative process used to comply with 3.C. (Understanding)					
STUDENT CRITERIA 4: Technical Knowledge (Und	lerstand	ling Level)			
4.A. Emerging Systems of Building Construction (Understanding)					
4.B. Emerging Technologies of Building Construction	v		т		I
(Understanding)	X		-		
4.C. Emerging Assemblies of Building Construction (Understanding)					

ARCH 4373
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COURSE SYLLABUS SCHOOL OF ARCHITECTURE

4.D. Methods and Criteria to Assess use of 4.C. (Understanding)				
STUDET CRITERIA 5: Design Synthesis (Skill Lev	el)			
5.A. Make Design Decisions within Architectural Projects (Ability)	X		R	
5.B. Demonstrate Synthesis of User Requirements (Ability)				
5.C. Demonstrate Synthesis of Regulatory Requirements (Ability)				
5.D. Demonstrate Synthesis of Site conditions (Ability)				
5.E. Demonstrate Synthesis of Accessible Design (Ability)				
5.F. Measurable Environmental Impacts on Design (Ability)			R	
STUDENT CRITIERA 6: Building Integration (Skill	Level)			
6.A. Demonstrate Integration of Building Envelope Systems(Ability)				
6.B. Demonstrate Integration of Building Assemblies (Ability)				
6.C. Demonstrate Integration of Structural Systems (Ability)				
6.D. Demonstrate Integration of Environmental Controls (Ability)				
6.E. Demonstrate Integration of Life Safety (Ability)				
6.F. Measurable Outcomes of Building Performance (Ability)				

ACCREDITATION/ASSESSMENT CRITERIA TABLE No. 2: ACCE CRITERIA					
	This course is structured to assist the student meet the following criteria shown in Table No. 2 as established				
by the American Council for Construction Education (ACCE) Standards and Criteria for Accreditation. To view					
the entire list, go to the ACCE website, www.acce-hq.org and view the "Accreditation Procedures."				1005	
Course Learning Outcomes:	ourse Learning Outcomes: Competencies		es	ACCE	
	(T, R, I)			A	
	Taught	Reinforced	Utilized/	Assessed	
	raugin	Reimorcea	Integrated	A3363364	
Create written communications appropriate to the construction					
discipline.					
2. Create oral presentations appropriate to the construction discipline					
3. Create a construction project safety plan					
4. Create construction project cost estimates					
5. Create construction project schedules					
6. Analyze professional decisions based on ethical principles.					
7. Analyze methods, materials, and equipment used to construct projects.					
Apply electronic-based technology to manage the construction process.	Т				
9. Apply basic surveying techniques for construction layout and control.					
10. Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.					
11. Understand construction accounting and cost control					
12. Understand construction quality assurance and control.					
13. Understand construction project control processes.					
14. Understand the legal implications of contract, common, and					
regulatory law to manage a construction project.					
15. Understand the basic principles of sustainable construction .					
16. Understand the basic principles of structural behavior .					
17. Understand the basic principles of mechanical, electrical and piping					
systems.					

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.			
R	Registration/Assembly Dates		Dates exam scores will be posted
*	Key Dates	1	Holidays
	Graduation Applications		Guest lectures
	Dates for Exams		Project Team Workshop
3	Proctored Exams		Class Sessions using ZOOM or teleconference technology
COMPLETED	Lecture Completed	Posted	Lecture Notes, Assignments, or Articles posted to CANVAS

	16 W	EEK CALENDAR	
Week One: Topic January 15-19, 2024	Parametric Design and Rhino Introduction		
	Face2Face Class		
University Events:	January 15, 2024 [Monday]	MARTIN LUTHER KING DAY (University Closed)	
	January 16, 2024 [Tuesday]	First Class Day Tuition & Fees Payment Due Date	
	January 16, 2024 [Tuesday]	TUITION AND FEES PAYMENT DUE DATE @ 5:00 PM	
	January 16-24, 2024	Late Registration/Late Registration Fee Begins (\$50.00)	
	[Tuesday-Tuesday]		
	January 17-26, 2024	ATTENDANCE REPORTING PERIOD (ND/SH).	
	[Tuesday- Wednesday]	Students who do not attend class during this period will have their courses removed and financial aid reduced or cancelled!	
Week Two: Topic January 22-26, 2024	Rhino Modeling	1	
University Events:			
Week Three: Topic January 29-February 2, 2024	Rhino Modeling 2		
	Face2Face Clas	S	
Assignment (s):			
University Events:	January 30, 2024 [Wednesday]	Financial Aid Refunds Begin	

B	January 31, 2024 [Wednesday]	CENSUS DATE (12 TH CLASS DAY)	
		FINAL DAY TO DROP/WITHDRAW FROM COURSE	
		WITHOUT ACADEMIC RECORD. [Note: A Financial Record will	
		still exist.]	
	February 1, 2024	WITHDRAWAL FROM COURSES "WITH ACADEMIC RECORD"	
	[Thursday]	(W) BEGINS.	
Week Four: Topic	Rhino Modeling	13	
February 5-9, 2024			
h	February 6, 2024	•	
University Events:	[Tuesday]	TOTAL PROPERTY OF TUITION AND FEES @	
		5:00 PM.	
Week Five: Topic	Grasshonner (G	GH) Introduction	
February 12-16, 2024	Cracenopper (c	in dudicion	
	Face2Face Clas	s	
University Events:	February 12, 2024	CENSUS DATE (20th CLASS DAY)	
Oniversity Events. 1	[Monday] February 15, 2024		
	[Wednesday]	PVAMU Architecture + Construction	
		Science Career Fair 2024	
		9:00 AM- 4:00 PM held in the Kennedy Architecture Building	
Week Six: Topic	Data Structure	and List	
February 19-23, 2024			
University Events:			
Week Seven: Topic	Function and Li	st1	
February 26-March 1,	Tanotion and Lioti		
2024			
<u> </u>	Project 1 (Midte	rm) Description	
University Events:			
Week Eight: Topic	Function and Li	st2 + Attractors	
March 4-8, 2024			
	Face2Face Clas	-	
	Project 1 Due b	y the end of the week	
l _m	Morel 7.0.0004		
University Events:	March 7-9, 2024 [Thursday-	Mid-Term Exams	
	Saturday]		
Week Nine: Topic		SPRING BREAK!	
March 11-15, 2024			
1			

University Events:	March 13, 2024 [Wednesday]	MID-TERM EXAM GRADES DUE	
	March 15, 2024 [Friday]	Spring Break (University Closed) SUBJECT TO APPROVAL BY THE TAMUS Board of Regents!	
Week Ten: Topic	Attractor and C	urves	
March 18-22, 2024	/ ttiractor and c		
5	March 20, 2024	Form date Devillances Commention	
University Events:	[Wednesday]	Founders Day/Honors Convocation	
Most Floren Test	0 (
Week Eleven: Topic March 25-29, 2024	Surface [Creation/Evaluation/Division]		
	Face2Face Class	SS	
University Events:	March 26, 2024 [Monday]	SPRING 2024 GRADUATION: FINAL DATE TO APPLY FOR GRADUATION! (Ceremony participation)	
	March 27, 2024	€	
	[Tuesday]	SPRING 2024 GRADUATION: Application for	
		Graduation-Degree Conferral Only Begins. (NO ceremony	
		participation or name listed in program.)	
	March 29, 2024	Good Friday (No classes: subject to approval	
	[Friday]	coal i iiaa, (ito ciaccos, cabject to appiotai	
		by the TAMUS Board of Regents)	
Week Twelve: Topic April 1-5, 2024	Surface Culling	/Splitting & BREPS	
	Final Project Pr	roposal	
	April 2, 2024	1	
University Events:	[Tuesday]	Priority Registration Period for continuing students for	
		Summer Term 2024, May/Summer 2024 Mini-Mester, and	
	April 6, 2024	Spring Semester 2024. [SPECIAL POPULATIONS]	
	[Saturday]	Registration Period for all students for Summer Term	
ľ		2024, May/Summer 2024 Mini-Mester, and Spring Semester	
		2024. [SPECIAL POPULATIONS]	
Week Thirteen: Topic April 8-12, 2024	Optimization and Genetic Algorithm (GA)		
	Final Project Pr	rogress	
b .	April 12, 2024		
University Events:	[Friday]	SPRING 2024 GRADUATION: Final Day to Apply for	
		Graduation-Degree Conferral Only. (NO ceremony	
		participation or name listed in program.)	
Week Fourteen: Topic	Final Project Pr	rogress	
April 15-19, 2024			
	Face2Face Clas	SS (Face2Face class may move to week 13 depending on class progress)	
Assignment (s):			

L	1	
University Events:		
Week Fifteen Topic April 22-26, 2024	Final Project Du	ue
Chapter (s):		
Assignment (s):		
University Events:	April 26, 2024 [Friday]	LAST DAY OF CLASS FOR SPRING SEMESTER 2024!
	April 26, 2024 [Friday]	FINAL DAY TO WITHDRAW FROM COURSES OR THE UNIVERSITY WITH ACADEMIC RECORD ("W") FOR SPRING 2024
Week Sixteen		nline Video Presentation Due
	April 29, 2024 [Monday]	STUDY DAY (NO CLASSES IN SESSION)
	[wonday]	STODI DAT (NO CLASSES IN SESSION)
	April 30-May 8, 2024 [Tuesday- Wednesday]	FINAL EXAMINATION PERIOD
	April 30-May 8, 2024 [Tuesday- Wednesday] May 9, 2024 [Thursday]	•
	April 30-May 8, 2024 [Tuesday- Wednesday] May 9, 2024	FINAL EXAMINATION PERIOD FINAL GRADES FOR GRADUATION

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.

I have read the Course Syllabus for A including the Class Lecture and Event Sch spelled out in this document. My signature objectives and succeeding in this education	edule, and agree to abide e indicates my personal c	by the conditions for the class as
Signature-Student		
Student name (Please print neatly)	Student ID #	//2024 Date
Signature-Instructor		
Instructors name	/2024 Date	
RETURN THIS PAGE FROM THE SYL ENROLL	LABUS TO THE INSTRU MENT IN THIS COURSE.	
□ RECEIVED WITH STUDENT'S SIGNATURE ☑ ENTERED INTO GRADE BOOK:	RE:	