



Course Title:	Net Zero Energy Design II		
Course Prefix:	ARCH	Course No.:	4643
		Section No.:	P01



“Passive building cuts energy consumption by 60-80 percent compared to code buildings. Certified passive buildings provide superior comfort, indoor air quality, and resilience. It’s about building science and balance. It’s the best path to Net Zero and Net Positive. And it’s not just for houses—passive building means schools, offices, hotels, high-rises.” - PHIUS

PHIUS is a 501(c)3 organization that provides research, technical standards, training, certification and design tools.

School of Architecture	Department: Architecture <input checked="" type="checkbox"/> Construction Science <input type="checkbox"/> Art <input type="checkbox"/> Digital Media Art <input type="checkbox"/> Community Development <input type="checkbox"/>
Course Location:	Nathelyne Archie Kennedy Building, Room 233
Class Meeting Days & Times:	Mondays and Wednesdays; 11:00 - 12:20 PM
Catalog Description:	“(3-0) Credit 3 semester hours. Passive House Certification principles and methodologies including design strategies, energy modeling, construction details & processes, and life cycle cost analysis.”
Prerequisites:	
Co-requisites:	
Mode of Instruction:	x Face-to-face <input type="checkbox"/> On-line <input type="checkbox"/> Hybrid
Instructor:	Michelle Pottorf, AIA, CPHC, LEED AP Assistant Professor
Office Location:	School of Architecture, Prairie View A&M University, Room 243
Office Telephone:	(832) 372-5497
Fax:	(936) 261-9826
Email Address:	mdpottorf@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, Thursday 8:00 AM - 10:45 AM OTHER HOURS BY APPOINTMENT. 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 bringing all applicable materials and information to the meeting.
Virtual Office Hours:	
Required Text:	None- course material will be provided.
Optional Text:	<u>Homes for a Changing Climate</u> , K. Klingenberg, M. Kernagis, M. James <u>Builder's Guide to Various Climates</u> (4 volumes), Joe Lstiburek; Publisher: EEBA Energy & Environmental Building Association, www.eeba.org , ISBN 0-9755127-1-4 <u>High Performance Enclosures</u> , John Straub; Publisher: Building Science Press (September 2011), www.buildingscience.com , ISBN: 978-0-9837953-9-1
Recommended Text/ Readings:	<u>Superinsulated Houses and Air-to-Air Heat Exchangers</u> , William Shurcliff; Publisher: Brick House Pub Co; Rev Sub edition (September 1988) ISBN-10: 0931790735
Learning Resources	<p>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.</p> <p>University Bookstore: Telephone: (936) 261-1990 web: https://www.bkstr.com/Home/10001-10734-1?demoKey=d</p> <p>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.</p> <p>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".</p>

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:



Climate science has shown that a two degree rise in temperature will have catastrophic effects on the Earth's ability to support life. We also know that buildings account for upward of 50% of the CO₂ emissions responsible for global warming. The building industry is therefore rapidly mobilizing to achieve net zero energy use in all new construction by 2030. Passive House Certification has set the bar as the most effective way to meet net zero energy performance through a combination of design principles, energy modeling, building science, and construction methodologies. While Passive House is paving the frontier, energy codes are quickly following behind en route to the inevitable requirement that all new construction meet net zero energy performance. Knowing how to achieve it will therefore no longer be optional within a decade, and those who know how to do so will be highly sought after in the job market. This course will prepare students to sit for the Certified Passive House Consultant (CPHC) exam. Achieving CPHC credentials will set Architects, Construction Science and Engineering majors apart in the job market as architectural firms, builders, general contractors, and mechanical engineers all gear up for this new future.

Course Outcomes/Learning Objectives

At the end of this course, the students will:

4643.1	Learn the principles of passive building design : heat transfer, air-tightness, thermal bridge free detailing, super-insulation, highly efficient ventilation, and moisture control.
4643.2	Learn WUFI Passive , the next-generation passive and hygrothermal modeling tool.
4643.3	Gain proficiency in energy modeling skills by completing an entire project including energy balancing (static and dynamic), and hygrothermal assessments of all building components and comfort assessments according to ASHRAE 55.
4643.4	Learn to implement high performance building science principles and passive house techniques in residential, commercial, and retrofit scenarios across all North American climate scenarios .
4643.5	Learn about suitable materials and components available in local U.S. and Canadian markets, and details for passive house applications according to climate.
4643.6	Learn the best air tightness strategies , thermal bridge free detailing and how to evaluate your design in THERM.
4643.7	Prepare for future job opportunities after graduation.

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

Instrument	Value (points or percentages)	Total
Assignments	12 assignments at 2 point each	24
Exams	28 quizzes at 1/2 points each	14
Project		12
Mid Term Exam		20
Class Attendance/Participation		10
Final Exam		20
Total:		100
Additional Credit/Bonus		5
Total:		100
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 *Edit to comply with your course.*

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.
U n i v e r s i t y 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	<p>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. Since attendance is critical to the learning objectives and the class discussions, ten percent (10%) of your grade will be based upon attendance and participation. Attendance alone will account for five percent (5%) of your grade. However, to gain an understanding of Passive House principles and methodologies, you must do more than just show up. Attentiveness is important. For example, showing up for class and then reading the newspaper will result in zero points for that day. Other things that could cause you to lose points would be sleeping in class, working on other assignments in class, being late, being rude or being disruptive. Being attentive during the lectures and discussions, will account for the other five percent (5%) of your grade. These points are <u>earned</u> by action on your part such as diligently taking notes, finding or sharing your thoughts on the subject being discussed, or asking a thoughtful and appropriate question. <u>If you are late to class you will lose all of the five percent (5%) participation points for that day.</u></p> <p>You are <u>not</u> in competition with your fellow classmates for involvement points. At the end of the semester, the instructor may award a growth grade worth an additional five percent (5%) based upon their overall assessment of your participation, growth and development during the semester. Participation and absences are accumulated beginning with the first day of class on January 14, 2019. 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:</p> <ol style="list-style-type: none"> 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. <p><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 your 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. In accepting your decision to miss class, you must also be willing to accept the instructor's decision to not award you involvement points for the class or classes that are missed.</p>
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Personal Conduct	<p>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:</p> <ol style="list-style-type: none"> 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. <u>No hats or caps will be allowed to be worn in the classroom during class sessions.</u> 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. <u>Dress Code for Presentations:</u> 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. <u>No food or drink</u> is allowed in the classroom at any time. 5. <u>Cellular telephones are to be turned off or put on silent ring tone</u> 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. <u>Laptops must emit no noise.</u> 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. <u>Harassment</u> of your fellow students of any kind will not be tolerated. 8. <u>No children, friends, family members or guests are allowed in the class without prior approval.</u> Failure to adhere to this rule will result in a "0" for that class period.
Conduct of the Class and Care of the Facility	<p>Please note the following rules for the conduct of the class.</p> <ol style="list-style-type: none"> 1. <u>Class will begin at the appointed time.</u> 2. <u>Class is dismissed when so indicated by the instructor.</u> 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 <u>keep the classroom in a clean and orderly manner</u> 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. <u>Lecture Notes and Handouts</u> 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 from another student or source.
Submission of Assignments:	<p>Assignments are due at the start of the class session. No late work will be accepted without proper documentation.</p>
Formatting Documents:	<p>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.</p>
Exam Policy:	<p>Exams should be taken as scheduled. No makeup examinations will be allowed except under documented emergencies (See Student Handbook).</p>

Professional Organizations and Journals	
Passive House Institute U.S. (PHIUS): www.phius.org Building Science Corporation: www.buildingscience.com	
References	
Articles on building science may be found at www.buildingscience.com .	
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:	<ol style="list-style-type: none"> 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 <input checked="" type="checkbox"/>	Understanding <input checked="" type="checkbox"/>	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)					
A.2. Design Thinking Skills (Ability)	<input checked="" type="checkbox"/>			R	
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					
B.1. Pre-Design (Ability)					
B.2. Site Design (Ability)					
B.3. Codes and Regulations (Ability)					
B.4. Technical Documentation (Ability)	<input checked="" type="checkbox"/>			R	
B.5. Structural Systems (Ability)	<input checked="" type="checkbox"/>			R	
B.6. Environmental Systems (Ability)	<input checked="" type="checkbox"/>		T		
B.7. Building Envelope Systems and Assemblies (Understanding)		<input checked="" type="checkbox"/>	T		
B.8. Building Materials and Assemblies (Understanding)		<input checked="" type="checkbox"/>	T		
B.9. Building Service Systems (Understanding)					
B.10. Financial Considerations (Understanding)		<input checked="" type="checkbox"/>		R	
REALM C: Integrated Architectural Solutions					
C.1. Research (Understanding)		<input checked="" type="checkbox"/>			I
C.2. Integrated Evaluations and Decision-Making Design Process (Ability)	<input checked="" type="checkbox"/>			R	
C.3. Integrative Design (Ability)	<input checked="" type="checkbox"/>			R	
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)					

ACCREDITATION/ASSESSMENT CRITERIA TABLE 2: ACCE CRITERIA

This course is structured to assist the student meet the following criteria shown in **Table No. 1** 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."

Course Learning Outcomes:	Competencies (T, R, I)		
	T Taught	R Reinforced	I Utilized/ Integrated
1. General Education (Communications, social sciences and humanities): The ability to communicate both orally and in writing, and have an understanding of human behavior.		R	
2. Math and Science (Mathematics and Physical Science): The ability to apply the principles of mathematics, statistics and computer science. The understanding of the behavior of materials, equipment and methods used in construction combined with knowledge of physics, chemistry, geology and environmental sciences.	T	R	
3. Business and Management: The knowledge to effectively manage the principle resources of the industry: people and money. Understanding the fundamentals of the free-enterprise system to include accounting, finance, business regulations, contract law, labor law, and marketing.			
4. Construction Science: An understanding of the contribution of the design process. The ability to communicate with the design professionals and participation in the planning phase of design-build projects. The ability to solve practical communication problems.	T	R	
5. Construction: Involvement and understanding of both office and field activities to include effective management of personnel, materials, equipment, costs and time. The understanding of the contractor's role as a member of a multi-disciplinary team, the assessment of project risk and alternative construction methods (Traditional Design-Bid-Build, Construction Manager and Design-Build).		R	
6. Other:			

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		Holidays
	Graduation Applications		Guest lectures
	Dates for Exams		Project Team Workshop

16 WEEK CALENDAR

Week One: Topic January 14-18, 2019	Introduction to Passive Building		
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	Building Science: Psychrometrics; Window Performance		
Chapter (s):			
Assignment (s):	Assignment #1		
University Events: 	January 21, 2019 [Monday]		MARTIN LUTHER KING DAY (University Closed)
Week Three: Topic January 28-February 1, 2019	Building Science: Insulation; Moisture; Thermal Bridging		
Chapter (s):			
Assignment (s):	Assignment #2		
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	PHIUS Building Assemblies: Roofs; Foundations	
Chapter (s):		
Assignment (s):	Assignment #3	
University Events: 		
Week Five: Topic February 11-15, 2019	PHIUS Building Assemblies: Solar Control; Walls	
Chapter (s):		
Assignment (s):	Assignments #4&5	
University Events: 	February 11, 2019 [Monday]	NOTE! 20 TH CLASS DAY
Week Six: Topic February 18-22, 2019	PHIUS Building Assemblies: Windows & Doors; Control Layers	
Chapter (s):		
Assignment (s):	Assignment #6	
University Events: 		
Week Seven: Topic February 25-March 1, 2019	PHIUS HVAC Systems: Fundamentals; Choices; Cooling w/ Ventilation; Mechanical Ventilation	
Chapter (s):		
Assignment (s):	Assignment #7&8	
University Events: 		
Week Eight: Topic March 4-8, 2019	Midterm Review; Midterm	
Chapter (s):		
Assignment (s):	Review Study Guide "PH Physics"	
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: 	 1 UNIVERSITY CLOSED ON MARCH 15, 2019				
Week Ten: Topic March 18-22, 2019	PHIUS Baseload & Renewable Energy Systems: Baseload; Domestic Hot Water; Photovoltaics				
Chapter (s):					
Assignment (s):	Assignment #9; Passive House Design Project (Exercise #1 Handed Out)				
University Events: 	<table border="1"> <tr> <td>March 19, 2019 [Tuesday]</td> <td>60% of term is completed!</td> </tr> <tr> <td>March 19, 2019 [Tuesday]</td> <td> MID-TERM EXAM GRADES DUE BY 11:59 pm</td> </tr> </table>	March 19, 2019 [Tuesday]	60% of term is completed!	March 19, 2019 [Tuesday]	 MID-TERM EXAM GRADES DUE BY 11:59 pm
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	PHIUS Energy Balancing				
Chapter (s):					
Assignment (s):	Assignment #10				
University Events: 	<table border="1"> <tr> <td>March 27, 2019 [Wednesday]</td> <td>Founders Day/Honor Convocation LAST DAY TO APPLY FOR SPRING 2019 GRDUATION (TO PARTICIPATE IN THE CEREMONY)</td> </tr> <tr> <td>March 29, 2019 [Friday]</td> <td>NOTE! WITHDRAW FROM COURSE "WITH RECORD ("W") ENDS.</td> </tr> </table>	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.
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	PHIUS Energy Balancing Continued				
Chapter (s):					
Assignment (s):	Assignment #11				
University Events: 	<table border="1"> <tr> <td>March 31–April 2, 2019</td> <td>Provost Program Review: MCD in Community Development</td> </tr> </table>	March 31–April 2, 2019	Provost Program Review: MCD in Community Development		
March 31–April 2, 2019	Provost Program Review: MCD in Community Development				
Week Thirteen: Topic April 8-12, 2019	Passive House Verification with WUFI Passive				
Chapter (s):					
Assignment (s):	Assignment #12 (Exercise 4)				
University Events: 	<table border="1"> <tr> <td>April 8, 2019 [Monday]</td> <td>NOTE! PRIORITY REGISTRATION BEGINS FOR FALL 2019 SEMESTER.</td> </tr> </table>	April 8, 2019 [Monday]	NOTE! PRIORITY REGISTRATION BEGINS FOR FALL 2019 SEMESTER.		
April 8, 2019 [Monday]	NOTE! PRIORITY REGISTRATION BEGINS FOR FALL 2019 SEMESTER.				
Week Fourteen: Topic April 15-19, 2019	THERM Tutorial				
Chapter (s):					
Assignment (s):	Assignment #12				

University Events: 	April 14–16, 2019	Provost Program Review: BS in Construction Science
	April 19, 2019 [Friday]	 Good Friday [Student holiday]
Week Fifteen Topic April 22-26, 2019	Overview of Hygrothermal and Dynamic Assessment of Components in WUFI Plus	
Chapter (s):		
Assignment (s):	Passive House Design Project Due	
University Events: 	April 21-23, 2019	Provost Program Review: BS in Digital Media Arts
Week Sixteen April 29-May 3, 2019	Final Review: FINAL ON TUESDAY, MAY 7	
	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 UNIVERSITY 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

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 4643** 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: _____