PRAIRIE VIEW A&M UNIVERSITY

SYLLABUS

Course Title:	**Sustainable Building**				
Course Prefix:	**ARCH**	**Course No.:**	**3463**	**Section No.:**	**P01**

"We are living on this planet as if we had another one to go to." Terri Swearingen

School of Architecture	Department: Architecture ☑ Construction Science ☐ Art ☐ Community Development ☐
Course Location:	Nathelyne Archie Kennedy Building, Room 115
Class Meeting Days & Times:	Thursdays; 6:00-8:20 PM
Catalog Description:	"(2-2) Credit 3 semester hours. Issues facing the design and construction industry in creating, building, and maintaining high performance buildings. Sustainable building projects will be analyzed; green building rating systems of the USGBC's LEED system and the DOE's Energy Star program will be studied and researched: as well as, research and group presentations of benchmark sustainable case study projects will be assigned.
Prerequisites:	ARCH 3463
Co-requisites:	**Sophomore**
Mode of Instruction:	**Face-to-Face**
Instructor:	Kim Schaefer, AIA, LEED AP BD+C Adjunct Associate Professor
Office Location:	School of Architecture, Prairie View A&M University, Rm 238
Office Telephone:	**(703-303-6560) Cell**
Fax:	(936) 261-9826
Email Address:	kims@terralogos.com; kischaefer@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:	OFFICE HOURS BY APPOINTMENT ONLY in Office #238. Generally I will be on campus by 4:30 pm on class days, Thursday afternoons. This may vary so make an appointment if you need to see me. 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:	**10 AM – 4 PM**
Required Text:	**LEED GREEN ASSOCIATE Exam Preparation Guide LEED v4 Edition by Heather C. McCombs. This textbook is available only online.** It can be ordered used from Amazon (must be v4 Ed.), directly through the USGBC (www.usgbc.org), **or at a special rate through the publisher**: American Technical Publishing. The publisher has set up a special website for students enrolled in this class. GO TO: http://www.atplearning.com/product/1695/leed-green-associate-exam-preparation-guide-pvamu and order the book. Cost is $75+/- plus shipping. Each student is required to have their own copy. **Allow 4 business days for shipping. Bring to class by the second class session on January 24, 2019.**
Optional Text:	Beginner's Guide to Green Building as found in the class DropBox folder; COTE Top 10 Criteria
Recommended	Cradle to Cradle, Wm McDonough; LEED Reference Guides for BD+C projects.

Text/Readings:	Natural Capitalism, H. Lovins, A. Lovins, P. Hawken **Online Websites: USGBC.org, ILBI.org, AIA.org, Energystar.gov**
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 Third Floor 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:	
	Students will become conversant with the fundamental principles of sustainable thinking as applied in designing, constructing, and operating & maintaining Sustainable Buildings. They will research and work collaboratively to evaluate, benchmark and analyze Green Projects while identifying the most effective tools used in high performance buildings. The USGBC's LEED Rating System and the DOE's Energy Star Program will be reviewed as well as other green building rating systems. Course will address issues of sustainability in the built environment on a Global, Local/Regional and Personal level while addressing sustainability for both architecture students and construction science majors.

Course Outcomes/Learning Objectives

At the end of this course, the students will:

3463.1	Understand fundamental principles of sustainability and the critical knowledge related to the **important role of Sustainable Design, Construction, and Maintenance of Sustainable Buildings.**
3463.2	Understand the **Metrics of Sustainable Building Performance Tools.**
3463.3	Understand **and analyze High Performance Buildings.**
3463.4	Prepare a **team project to analyze a space for Sustainable Performance.**
3463.5	Understand the **Interactive aspects of Sustainable Design and Construction, introduction to the Integrative Design Process (IDP) for Sustainable Building Projects through via small group in-class exercises and projects.**
3463.6	Develop and demonstrate the **ability to solve environmental challenges**. Develop and demonstrate the ability to **effectively communicate** to the project team your point of view in the Sustainable design, construction and operations process.
3463.7	Prepare a group Case Study / research paper **demonstrating your knowledge of a benchmark Sustainable Building Project and the LEED Rating system.**

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, class projects

Grading Matrix

Instrument	**Value (points or percentages)**	**Total**
Class Participation & Attendance	150 pts	30%
Attendance		
In class group Exercises (by Study Group)		
Sketchbook (turned in at the end of the semester for weekly assignments)		
Various Assignments all Semester	75 pts	15%
Mid Term Exam (Open Book)	75 pts	15%
Semester Case Study Group Project	100 pts	20%
Final Exam (Possibly Open Book**)**	100 pts	20%
Total:	**500 points for the semester**	**100%**
Extra Credit Credit/Bonus	50 pts awarded throughout semester	**10% additional**
		0
Grade Determination:	A = 450 to 500 points (top 10%) B = 375 to 449 points (15%) C = 300 to 374 points (15%) D = 250 to 299 points (10%) F = 249 points or below (bottom 50%)	

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 your name and signature. Since attendance is critical to the learning objectives and the class discussions, 30% of your grade is based on class attendance and participation as noted above. The 300 points you can earn over the semester will be allocated to the four tasks under this category starting in Week 2 and running each week throughout the semester. Attendance and participation are also critical to learning to work in the highly collaborative, cross disciplinary and team-oriented nature of sustainable design and construction work. The semester group project is worth 15% of your grade, to also foster true collaboration, an approach used in sustainable professional practice. Students will also be expected to keep a sketchbook to improve critical thinking and observation skills. There will be out-of-class weekly assignments in the Sketchbook which is to be brought to class each week. Weekly Assignments will be handed out at the end of each class due at the beginning of class the following week and are to be kept in a three ring binder that will be turned in at the end of the semester for review by Prof Schaefer. To earn attendance points students must turn off cell phones and put them away in backpacks, unless needed for emergency purposes; and arrive on time and stay for the full class. Late times will be noted for any student not signed in by 6:10 pm. If students have a cell phone related issue they must discuss this with the Instructor prior to the start of class. Points will be deducted in the Class Participation grade for sleeping in class, working on other assignments in class, being late, being rude or being disruptive or using your cell phone. If cell phones are being charged they must still be put away in a back pack or purse. Students are encouraged to bring a laptop or tablet to class for use during the second half of class and not during the lecture. You are not in competition with your fellow classmates for class participation points. Class Participation and absences are accumulated beginning with the second class on **January 24, 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: 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. If you miss class for one of these reasons, you must provide a written and printed memorandum or letter signed by a university official, that explains the absence, lists the date and indicates which university approved absence this falls under. Supporting documentation is also required 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. 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. In accepting your decision to miss class, you must also be willing to accept the instructor's decision to not award you class participation points for the class or classes that are missed. To assist you in recovering

	lost points, there is always an opportunity to earn extra credit from the extra credit assignments or keeping a superior sketchbook.
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. 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, and put away – out of sight during the class period. Texting is strictly prohibited during the class period. No "ear phone" units, head phones or listening to music will be allowed during class. If your cell phone rings during the lecture or you are texting you are subject to losing all participation point for that class period, and if it continues will be reported to school administration. These rules also apply to I-watches or other electronic devices that allow you to text or send messages outside of the classroom. 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 and no receipt of the assignments. 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. 5.
Submission of Assignments:	**Assignments are due at the beginning of class** and will be marked late if turned in after 6:10 pm. No late work will be accepted without proper documentation.
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:	Exams should be taken as scheduled. No makeup examinations will be allowed except under documented emergencies (See Student Handbook).

Professional Organizations and Journals

Gulf Coast Green, Greenbuild, seminar attendance is recommended. AIA COTE; USGBC Gulf Coast or Austin Chapter

References

USGBC's LEED GUIDELINES V4

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. Students who cannot take in class exams are required to make arrangements with the PVAMU Testing Center and with the Instructor ONE WEEK IN ADVANCE OF THE EXAM DATE, as noted in the Syllabi.
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	THIS IS NOT AN ONLINE

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 "2018 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)	☑			**R**	I
A.2. Design Thinking Skills (Ability)					

A.3. Investigative Skills (Ability)					
A.4. Architectural Design Skills (Ability)		☑`		**R**	
A.5. Ordering Systems (Ability)				**R**	
A.6. Use of Precedents (Ability)					
A.7. History and Global Culture (Understanding)					
A.8. Cultural Diversity and Social Equity (Understanding)			**T**		I
REALM B: Building Practices, Technical Skills, and Knowledge					
B.1. Pre-Design (Ability)					
B.2. Site Design (Ability)	☑				
B.3. Codes and Regulations (Ability)	☑	☑		**R**	
B.4. Technical Documentation (Ability)		☑		**R**	
B.5. Structural Systems (Ability)					
B.6. Environmental Systems (Ability)				**R**	I
B.7. Building Envelope Systems and Assemblies (Understanding)		☑		**R**	
B.8. Building Materials and Assemblies (Understanding)		☑		**R**	
B.9. Building Service Systems (Understanding)					
B.10. Financial Considerations (Understanding)		☑		**R**	
REALM C: Integrated Architectural Solutions					
C.1. Research (Understanding)					
C.2. Integrated Evaluations and Decision-Making Design Process (Ability)	☑		**T**		
C.3. Integrative Design (Ability)	☑		**T**		
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)		☑	**T**		
D.5. Professional Conduct (Understanding)		☑	**T**		

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.		**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	**T**		**I**

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).			
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

Insert general topics and assignments.

Week One: Topic **January 14-18, 2019** (Class on TH 1/17/2019)	Lecture Segment #1 **Introductions: Sustainable Thinking & the built environment,** class organization, review syllabus, grading, basic principles of sustainability; The final course syllabus will be available online by the second week of the semester.	
Chapter (s):	Introduction of Semester Vocabulary List	
Assignment (s):	First Class Survey, WEEKLY ASSIGNMENT: Observing Nature	
University Events:	**January 16,2019 [WED]**	**UNDERGRADUATE: LATE REGISTRATION/ADD COURSES FOR SPRING 2019**
	January 18,2019 [FRI]	**ADD-DROP COURSES/CHANGE COURSES PERIOD ENDS**
Week Two: Topic **January 21-25, 2019** (Class on TH 1/24/2019)	Lecture Segment #2 – **Climate Change, Carbon footprint,** Impact of buildings & people on the environment, Closing Loops discussion & in class activities exercises conducted; Introduction to LEED v4.0	
Chapter (s):	Chapter 3 & 4 of the LEED GA Exam Prep Guide LEED v4 textbook	
Assignment (s):	In class group Carbon Footprint Calculations, Turn in 1st Class survey, WEEKLY ASSIGNMENT: Sketchbook; Vocabulary Words; TBD	
University Events:	**January 21, 2019 [MON]**	**MARTIN LUTHER KING DAY (University Closed)**
Week Three: Topic **January 28- Feb 1, 2019** (Class on TH 1/31/2019)	Lecture Segment #3 – **Introduction to Water,** conservation, sustainable practices and LEED water credits; Introduce Resilient House case study; Review principles of sustainability, hydrological cycle.	
Chapter (s):	Read Chapter 7 in LEED GA Exam Prep Textbook;	
Assignment (s):	WEEKLY ASSIGNMENT: **Introduce Semester Individual Paper Assignment** Sketchbook; Vocabulary Words; TBD	
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.
		SPRING 2019 GRADUATION LATE APPLICATION DEADLINE. There will be NO exceptions to this deadline!
	February 1, 2019 [Friday]	**NOTE! WITHDRAWAL FROM COURSES "WITH ACADEMIC RECORD" (W) BEGINS. ENDS MARCH 29, 2019**

Week Four: Topic **February 4-8, 2019** (Class on TH 2/7/2019)	Lecture Segment #4: **Sustainable Sites** – criteria, LEED credits, • Exploration of local climate and regional ecosystem • Low Impact Development (LID) • Looking for cascading benefits in site design, construction, operations Evaluate Houston resilient site design for residential case study	
Chapter (s):	Read Chapter 5 & 6 of LEED GA Exam Prep Guide textbook	
Assignment (s):	In Class: In class small group: collect weather data and bio region data; group work on Sustainable Site Analysis; evaluate cascading benefits; WEEKLY ASSIGNMENT: Sketchbook; Vocabulary Words; TBD	
University Events:		
Week Five: Topic **February 11-15, 2019** (Class on TH 2/14/2019)	Lecture Segment #5 – Introduction to **Materials** in sustainable building, recycling, LEED Material credit categories; the waste management cycle (NOTE: recycling and waste management further exploration in Week 10 or 11); material flows in sustainable building.	
Chapter (s):	Read Chapter 9 of LEED GA Exam Prep Guide textbook	
Assignment (s):	In Class: Waste Cycle analysis; Explore 4 LEED rating programs; WEEKLY ASSIGNMENT: Sketchbook, 2 Vocabulary Words; TBD	
University Events:	**February 11, 2019 [Monday]**	**NOTE! 20TH CLASS DAY**
Week Six: Topic **February 18-22, 2019** (Class on TH 2/21/2019)	Lecture Segment #6: **Energy Part 1** – Review LEED Energy Credits • Types of energy/ terms – use in buildings; EUI calculation • Energy Use in Residential Case Study and Commercial /Institutional buildings • Review LEED Energy Pre-requisites; Commissioning process	
Chapter (s):	Read Chapter 8 in the LEED GA Exam Prep Guide textbook (pp125-136 & pp 146-147)	
Assignment (s):	In Class: In class small group: Bring in home energy bills, analysis of an energy model? Establishing EUI, and building energy baseline; evaluate cascading benefits in energy savings; WEEKLY ASSIGNMENT: Sketchbook; 2 Vocabulary Words; carbon footprint calculator Part 2	
University Events:		
Week Seven: Topic **February 25 - Mar 1, '19** (Class on TH 2/28/2019)	Lecture Segment #7: **Energy Part 2** • Renewables – definition; intro to types (This information will be covered in a later lecture) • Terms and measuring energy • Energy Star reports for home energy calculation	
Chapter (s):	Read Chapter 8 in the LEED GA Exam Prep Guide textbook (pp137 – 145)	
Assignment (s):	**Papers due at beginning of Class.** In Class: Explore each of the major renewable energy sources; Review EUI, and building energy baselines; **Introduce Case Study Assignment** – start group formation. WEEKLY ASSIGNMENT: Sketchbook; Vocabulary Words; TBD	
University Events:		

Week Eight: Topic **March 4-8, 2019** (Class on TH 3/7/2019)	**Mid Term Exam** – 1st half (75 minutes for exam) 2nd half – organize groups for Case study Project; turn in Case Study Outline Form	
Chapter (s):	None this week	
Assignment (s):	Exam; Introduce Group Case Study projects- WEEKLY ASSIGNMENT: Sketchbook; Confirm selection of Case Study group, and project selected.	
University Events:	Mid Term EXAMS March 7 to 9, 2019 Thursday through Saturday	
Mid-Term Exam	**March 7, 2019 Thursday**	
Week Nine: Topic **March 10-15, 2019 (NO CLASS** TH 3/14/2019**)**	**SPRING BREAK!** **(University closed on March 15, 2019**	
Week Ten: Topic **March 18-22, 2019** (Class on TH 3/21/2019)	Lecture Segment #8: **Indoor Environmental Quality (IEQ) and Interior Materials**, Concepts of healthy buildings and IAQ; Life Cycle Assessments (LCAs); True Cost Accounting	
Chapter (s):		
Assignment (s):	Turn in Group Case Study selection and group members list. WEEKLY ASSIGNMENT: Sketchbook; 3 Vocabulary Words; TBD	
University Events:	**March 19, 2019 [Tuesday]**	**MID-TERM EXAM GRADES DUE**
Week Eleven: Topic **March 25-29, 2019** (Class on TH 3/28/2019)	**Renewable Energy, passive design for energy savings & comfort, sustainable neighborhood design**	
Chapter (s):	TBD	
Assignment (s):	Turn in Group Case Study cover sheet and references; In Class: Work on Group Case Study, Q+A with Mr. Smith; WEEKLY ASSIGNMENT: Sketchbook; 3 Vocabulary Words; TBD	
University Events:	**March 27, 2019 [Wednesday]**	**Founders Day/Honor Convocation** **NOTE! LAST DAY TO APPLY FOR SPRING 2019 GRADUATION (CEREMONY PARTICIPATION AND NAME LISTED IN PROGRAM)**
	March 29, 2019 [Friday]	**NOTE! WITHDRAW FROM COURSE "WITH RECORD ("W") ENDS**
Week Twelve: Topic **April 1-5, 2019** (Class on TH 4/4/2019)	**Guest Lecture – Mark D Smith, AIA, LEED AP of ChangePlanet and HOK presenting sustainable small residential projects.** • Energy Star for residential projects	
Chapter (s):	Read Chapter 11 in LEED GA Exam Prep Guide textbook	
Assignment (s):	In Class: 2 Group Case Study Presentations; WEEKLY ASSIGNMENT: Sketchbook; 3 Vocabulary Words; TBD	
University Events:	**Mar 31 – Apr 2, 2019**	**Provost Program Review: MCD in Community Development**
Week Thirteen: Topic **April 8-12, 2019** (Class on TH 4/11/2019)	Lecture Segment #9: **LEED catchall & review; becoming certified in LEED** • Review LEED Innovation and Regional Priority Credits • Integrated Design Process	
Chapter (s):	Read Chapter 1 of LEED GA Exam Prep Guide textbook	
Assignment (s):	In Class: 2 Groups Case Study Presentation Bring 3-ring notebook to class for in class review; WEEKLY ASSIGNMENT: Sketchbook; 3 Vocabulary Words; TBD	
University Events:	**April 8, 2019 [Monday]**	**NOTE! PRIORITY REGISTRATION BEGINS FOR FALL 2019 SEMESTER.**

Week Fourteen: Topic **April 15-19, 2019** (Class on TH 4/18/2019)	**Other green building rating systems** • Living Building Challenge, Well Building, SITES, • COTE Top 10 Criteria	
Chapter (s):	Read Chapter 2 of LEED GA Exam Prep Guide textbook	
Assignment (s):	In Class: Final 2 Groups Case Study Presentation; **Turn in Sketchbooks for review & grading.** WEEKLY ASSIGNMENT: Vocabulary Words; TBD	
University Events:	**April 19, 2019 (Friday)**	**Good Friday [Student Holiday]**
Week Fifteen Topic **April 22-26, 2019** (Class on TH 4/25/2019)	**Whole Semester Review** • Whole Course content review – by students, by case study groups • All vocabulary words review • Principles and elements of sustainability review • LEED BD+C rating system review	
Chapter (s):	None this week	
Assignment (s):	**Last official class;** turn in Group Case Study Project Sheet	
University Events:	**April 21-23, 2019**	**Provost Program Review: BS in Digital Media**
Week Sixteen **April 29 to May 3, 2019** (Class on TH 4/25/2019)	**FINAL EXAM, Thursday May 2, 2019** Note: Last official Class Day 4/30/2019 • Complete exit survey and sustainability commitment card	
	May 1-7, 2019 [Wednesday-Tuesday]	**FINAL EXAMINATION PERIOD** **FINAL GRADES FOR GRADUATION CANDIDATES DUE BY 12:00 PM ON May 9, 2019!!!!**
	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 3463** Sustainable Buildings for the Fall Semester 2018, 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**: _____