

School of Architecture
The University of Texas at Austin
ARC 327R / ARC 386M / LAR388
Summer 2020, June 4 - July 9

Appropriate Materials for the 21st Century

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This web-based course examines the global impacts of key materials used in the built environment. The built environment - including our infrastructure, buildings, landscape, transportation systems, furniture, apparel, and all human-made or manipulated objects - is in constant evolution. Underlying these changes is the discovery, development, and implementation of raw materials. The impact of our collective material use increases as human population and resource consumption grow in size and complexity - leading one to ask, "What materials are most appropriate for the 21st Century?" This course examines the criteria by which we determine whether a material is "appropriate" - introducing a range of materials, strategies, and precedents.

LEARNING OBJECTIVES

- Comprehension of material consumption and production in the built environment, based on an understanding of material evolution from prehistory to the present
- Comprehension of the complex environmental, socioeconomic, and ethical challenges that result from current and projected material use in the built environment
- Knowledge of materials and strategies that offer solutions to these challenges
- Knowledge of a wide range of products and buildings around the world that utilize appropriate materials and material strategies
- Development of critical thinking and writing skills
- Development and articulation of a rigorous material manifesto

COURSE FORMAT

- The course is asynchronous; there are no set meeting times, but regular deadlines
- The course is entirely web-based; all materials are accessed and submitted via Canvas
- The course is divided into three parts; each part is comprised of four modules
- In addition to twelve teaching modules, there is one introduction module
- Teaching modules contain the following elements:
 - Lessons: narrated slideshow lectures and text
 - Multi-media content: required readings, films, clips, podcast
 - Discussion post prompt
 - Activity or small discussion group
 - Quiz
 - Feedback survey
- The final project, a zine, is split into three submissions spread throughout the class

COURSE SCHEDULE*

- All content released at 8:00am CST
- All deadlines set at 10:00pm CST
- *The course schedule is subject to change

PART 1: MATERIAL LITERACY / June 4 - June 15

Module 1: Defining Materials

Module 2: Material Evolution, part 1

- Due Thu 6/4: M0 introduction post
- Due Fri 6/5: M0 introduction post responses
- Due Mon 6/8: M1-2 lectures and required content; M1 quiz; M2 quiz; M1-2 discussion post; M1-2 activity
- Due Tue 6/9: M1-2 discussion post response

Module 3: Material Evolution, part 2

Module 4: Materials Today

- Due Thu 6/11: M3-4 lectures and required content; M3 quiz; M4 quiz; M3-4 discussion post
- Due Fri 6/12: M3-4 small group discussion

Project 1: Zine Part 1

- Due Mon 6/15: Zine P1
- Due Tue 6/16: Zine P1 peer response feedback

PART 2: MATERIAL CRITERIA / June 16 - June 25

Module 5: Welfare

Module 6: Accessibility

- Due Thu 6/18: M5-6 lectures and required content; M5 quiz; M6 quiz; M5-6 discussion post
- Due Fri 6/19: M5-6 small group discussion

Module 7: Performance

Module 8: Value

- Due Tue 6/23: M7-8 lectures and required content; M7 quiz; M8 quiz; M7-8 discussion post; M7-8 activity
- Due Wed 6/24: M7-8 discussion post response

Project 2: Zine Part 2

- Due Thu 6/25: Zine P2
- Due Fri 6/26: Zine P2 peer response feedback

PART 3: 21ST CENTURY MATERIALS / June 26 - July 8

Module 9: Circular Materials

Module 10: Information Materials

- Due Tue 6/30: M9-10 lectures and required content; M9 quiz; M10 quiz; M9-10 discussion post
- Due Wed 7/01: M9-10 small group discussion

Module 11: Cultivated Materials

Module 12: Dematerialization

- Due Fri 7/03: M11-12 lectures and required content; M11 quiz; M12 quiz; M11-12 discussion post; M11-12 activity
- Due Wed 6/24: M11-12 discussion post response

Project 3: Completed Zine

- Due Wed 7/08: Final zine
- Due Thu 7/09: Zine peer response feedback

ASSIGNMENT DESCRIPTIONS

Quizzes / 120 points / ~18.4% (12 quizzes worth 10 points each)

- One quiz per module, "open-book" with 20-minute time limit
- Questions cover all module content (lectures, required readings and multimedia)
- Question formats include multiple-choice, true/false, fill-in-the-blank, and short response

Discussion posts / 90 points / ~13.8% (6 posts worth 15 points each)

- One discussion board post per 2 modules
- 400-word response to a prompt, publicly posted to the class discussion board

Activities / 45 points / ~6.9% (3 activities worth 15 points each)

- One activity per Part 1, Part 2, and Part 3
- Short experiential learning activity

Small Group Discussions / 45 points / ~6.9% (3 discussions worth 15 points each)

- One small group discussion per Part 1, Part 2, and Part 3
- Remote discussion conducted in randomly assigned groups of five students

Project 1 / 100 points / ~15.3%

- Zine part 1, including spreads 1 - 3 and draft cover page, contents, bibliography, author bio

Project 2 / 100 points / ~15.3%

- Zine part 2, including spreads 1 - 6 and draft cover page, contents, bibliography, author bio

Project3 / 120 points / ~18.4%

- Completed zine

Discussion Board responses / 18 points / ~2.8% (3 responses worth 5 points each, plus intro post 3 points)

- Feedback response to a randomly assigned classmate's discussion board post

Project feedback / 15 points / ~2.3% (3 responses worth 5 points each)

- Feedback response to a randomly assigned classmate's project post

Feedback Surveys / 0 points / 0% (12 surveys that are mandatory but ungraded)

- One survey per module
- Opportunity to provide feedback on module content, scope, and pacing

ASSESSMENT CRITERIA

Written assignments and dialogue account for the majority of your grade in this course, and will be graded by the following criteria:

- Evidence of comprehension of the assigned content
- Integration of assigned content in the development of unique perspectives
- Clarity, depth, and sophistication of argument and discussion
- Adherence to deadlines and thoroughness of work, including proofreading, proper sentence and paragraph structure, adherence to format, and proper use of citations

GRADING SCALE

A (93-100%) / A- (90-92.9%) / B+ (87-89.9%) / B (83-86.9%) / B- (80-82.9%) / C+ (77 - 79.9%) / C (73 - 76.9%) / C- (70 - 72.9%) / D+ (67-69.9%) / D (63-66.9%) / D- (60-62.9%) / F (<60%)

UNIVERSITY RESOURCES

The University of Texas at Austin Libraries / lib.utexas.edu

Assistance with research, citation, and more; accessible online or via phone

University Writing Center / uwc.utexas.edu

Provides free, one-on-one writing consultations to all students and provides a number of helpful [writing guides online](#)

COURSE POLICIES

Policy on scholastic dishonesty

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. For further information, please visit the Office of Student Conduct and Academic Integrity website at <http://deanofstudents.utexas.edu/conduct/>.

Use of e-mail for official correspondence to students

All students should be familiar with the University's official e-mail student notification policy. It is the student's responsibility to keep the University informed as to changes in his or her email address. Students are expected to check email on a frequent and regular basis in order to stay current with University-related communications, recognizing that certain communications may be time-critical. The complete text of this policy and instructions for updating your e-mail address are available at <http://www.utexas.edu/its/policies/emailnotify.html>.

Students with disabilities

Please notify your instructors of any modification/adaptation you may require to accommodate a disability-related need. You may find out more information on the Services for Students with Disabilities website:

<http://diversity.utexas.edu/disability/> and/or <http://diversity.utexas.edu/disability/how-to-register-with-ssd/>

Religious holidays

A student who misses classes or other required activities, including examinations, for the observance of a religious holy day should inform the instructor as far in advance of the absence as possible, so that arrangements can be made to complete an assignment within a reasonable time after the absence.

University of Texas honor code

"As A Student Of The University Of Texas At Austin, I Shall Abide By The Core Values Of The University And Uphold Academic Integrity."