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INT 321-001: Methods and Materials

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Fall 2018
School of Art + Design
New Jersey Institute of Technology

INT 321 Methods & Materials

INSTRUCTOR: David Brothers / 681 Weston / dabrothers@gmail.com / brothers@njit.edu /
Office hours: Monday 10-11.30 / Thursday 10-11.30

COURSE STRUCTURE: *Tuesday* 1:00-4:00p Credits - 3

Class time will be divided between lectures, discussions, in-class assignments and reviews. Significant work will be expected outside of required class time based upon assignment expectations. All students are expected to complete required reading, participate in class discussions and to initiate ideas and effort beyond the minimum requirements.

COURSE DESCRIPTION: The study of materials, products, and assemblies used in interior design. The course covers code requirements and life safety, specification, installation, performance of materials (including fabrics and textiles), and sustainability of material selection and utilization. Also covered are the impacts of materials utilization on health and interior environmental quality.

PREREQUISITES: [AD 111](#), [AD 112](#), [AD 150](#) or [ARCH 334](#), [AD 161](#), [AD 162](#) and [ARCH 251](#)

COURSE OBJECTIVES

At the completion of this course students will be able to:

- identify interior finish materials and products
- use selection criteria (aesthetics, cost, durability, maintenance, limitations of material sizes & finishes, typical installation methods, code-related issues, delivery lead time and sustainable issues) to inform decision making about material choices.
- identify the various codes impacting the specification of interior finish materials.
- use industry-typical research methods to identify materials sources

CIDA LEARNING & COMPETENCY OBJECTIVES

The Council for Interior Design Accreditation accredits NJIT's interiors program. CIDA has 16 Standards, consisting of 79 subcategories, which must be covered by any curriculum to attain approval. This course satisfies (all or in part) the following criteria:

2a. Student work demonstrates understanding of the concepts, principles, and theories of sustainability as they pertain to building methods, materials, systems, and occupants.

11a. Students have awareness of a broad range of materials and products.

11b. Students have awareness of typical fabrication and installation methods, and maintenance requirements.

12c. Students understand the principles of acoustical design.

12d. Students understand appropriate strategies for acoustical control.

14a. Students have awareness of sustainability guidelines.

14b. Students have awareness of industry-specific regulations.

TEXTS (Required)

Gesimondo, Nancy & Postell, Jim. *Materiality and Interior Construction*. (Hoboken, NJ: John Wiley & Sons, Inc., 2011)

TEXTS (Reference)

Ballast, D. K. (2013). *Interior Construction & Detailing for Designers & Architects* (Sixth ed.).

Bell, Victoria Ballard and Rand, Patrick. *Materials for Design*. New York: Princeton Architectural Press, 2006.

Bingelli, Corky. *Interior Design: Materials for Interior Environments*. Hoboken (NJ): Wiley, 2013, 2nd ed.

Bingelli, Corky and Greichen, Patricia. *Interior Graphic Standards*. Hoboken (NJ): Wiley, 2010, Second Edition.

Brown, Rachel and Farrelly, Lorraine. *Materials and Interior Design*. London: Laurence King Publishing, 2012.

Ching, Francis D.K.. *Interior Design Illustrated*. Hoboken, N. J. :: John Wiley & Sons.

Godsey, Lisa. *Interior Design Materials and Specifications*, New York: Fairchild Books, 2013

Plunkett, Drew. *Construction & Detailing for Interior Design*. London: Lawrence King 2010

Rupp, William and Freidman, Arnold. *Construction Materials for Interior Design*. Whitney Library of Design, 1989

Thompson, Rob and Thompson, Martin. *Sustainable Materials*. London: Thames & Hudson, 2013.

CLASS GUIDELINES

1 ATTENDANCE: You are expected to attend every class unless there is an acceptable excuse (see below). You are expected to be present in class for the entire duration of the class. If you arrive late or leave early without prior approval of your instructor you will be considered absent. An attendance sheet will be circulated at the beginning of each class. You are responsible for signing the sheet. If you miss a class, you are responsible for the material and directions covered. The NJIT attendance policy is as follows: ***After three absences students may be docked one-half grade for each subsequent unexcused absence.*** (i.e., if the final grade would have been an 'A', it results in a 'B+'. A 'B+' becomes a 'B' and so on. There is a one-half grade penalty for EACH absence after the third) and students will not be permitted to return to class without permission from both the instructor and class coordinator. Additionally, ***one absence will be recorded for every three late arrivals to class.*** A late arrival is defined as arriving to class 5 minutes or more after the start. NOTE: *Anyone arriving after 30 minutes from the start of class will be marked absent.*

Acceptable Absences:

Documented Illness or Unavoidable Circumstance

The only accepted documentation is notification from the Dean of Students. Your instructor will not accept notes from doctors directly. Students must present appropriate documentation to the Dean of Students within two lectures of returning.

Religious Observation

Students must inform their instructor **prior** to class that they will miss a session (or more) due to religious observance. Students are permitted to observe religious holidays of one *and only one* religion per semester.

2 ASSIGNED WORK: Work is due as scheduled on the Syllabus or assigned by your instructor. Late work will be accepted at the discretion of the instructor but will be dropped in grade.

3 EXAMS: Students must sit for all exams in order to receive credit for the class. Only excused absences **before** the exam is to take place will be considered for make-up at a later date.

4 DIGITAL TECHNOLOGY: *Cell phones and all PDA devices* are not permitted to be used in class to send or receive messages. If your phone disturbs the class you may be asked to leave and assigned an absence for that day.

Laptop computers are to be used exclusively for note taking and CAD. Under no circumstances are students permitted to use email, instant messaging, web surfing, or video/audio streaming during studio unless expressly authorized by the instructor for the purpose of specific classroom instruction.

5 STUDENT ACCOMMODATIONS

All reasonable efforts will be made to accommodate a student with a temporary disability (e.g., broken arm, protracted illness, etc.) as long as the student is responsible for communicating with their instructor about the issue and for cooperating in its resolution. Students with more permanent physical or learning disabilities must provide documented requests for accommodation to their instructor *at the beginning of the semester* (or as soon as the disability is diagnosed and documented). Students should contact the Disability Office (<http://www.njit.edu/counseling/services/disabilities.php>) for further information and instruction for obtaining medical and/or psychological disability documentation.

ACADEMIC CONDUCT & INTEGRITY

“Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at:

<http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf>.

*Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. **Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university.** If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu”*

GRADES

Your grade for the semester will consist of the following assignments.

Lab Projects	15%
Homework Projects	35%
Reading Comprehension Quizzes	10%
Mid-term	15%
Final Exam	25%

Reading Comprehension quizzes are assigned a check plus (100), check (85), check minus (72), or check minus-minus (59). If you do the assigned reading in advance of the class, you should do well on these quizzes. They are intended to be easy but they are based on material that we will not yet have discussed in class and will be unfamiliar to you. If you miss a class when there is a Reading Comprehension Quiz and you do not have an excused absence you will receive a zero (0) for the quiz. *This will greatly influence your cumulative Reading Comprehension Quiz average grade – make sure you come to class!*

GRADING CRITERIA

The Institute guidelines for grading are as follows. These guidelines will be used by your instructor to evaluate your work. Please familiarize yourself with these standards and discuss any questions with your instructor.

- A** Superior (4.0)
Student learning and accomplishment far exceeds published objectives for its competency and/or innovation.
- B+** Excellent (3.5)
B Very Good (3.0)
Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development and/or innovative experimentation.
- C+** Good (2.5)
C Acceptable (2.0)
Student learning and accomplishment meets all published objectives for the course/test/assignment and student work demonstrates the expected level of understanding and application of concepts introduced.
- D** Minimum (1.0)
Student learning and accomplishment based on the published objectives for the course/project/test were met with minimum passing achievement.
- F** Inadequate (0.0)
Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

PRELIMINARY SCHEDULE

(Note: This schedule is likely to be modified throughout the semester as field trips are coordinated with student schedules. Students are cautioned to keep track of university deadlines external to the School of Art + Design.)

DATE	QUIZ	TOPIC	READING	HWK
Sep 4		Introduction/Class Guidelines Materials Selection Criteria	<i>Materiality in Interior Construction</i> Chapt. 2: pp. 190-202 Chapt. 3: pp. 282-283 Chapt. 4: pp. 317-320 Chapt. 5: pp. 359-368	Issue: EX1_Texture+Finish <i>Task 1 Due: Sep 11</i>
Sep 11	Read Comp Quiz 1	Lesson: Wood-1 Lab: Woodshop/ In class work on EX1	<i>Materiality in Interior Construction</i> Chapt. 5: pp. 369-371 Chapt. 5: pp. 376-380 <i>Handout: Construction Materials Manual</i> Wood & wood-based products: pp. 66-75	EX1_Texture+Finish <i>Project Due: Sep 18</i>
Sep 18	Read Comp Quiz 2	Lesson: Wood-2 Lab: Review Ex1: Texture+Finish	<i>Materiality in Interior Construction</i> Chapt. 3: pp. 203-217 pp. 241-247 pp. 252-265 Chapt. 4: pp. 305-307 pp. 311-312	
Sep 25	Read Comp Quiz 3	Lesson: Plaster & Drywall Lab: Ex2: Wall Detailing	<i>Materiality in Interior Construction</i> Chapt. 3: pp. 234-240	EX2_Partition Details <i>Due: Oct 02</i>
Oct 2	Read Comp Quiz 4	Lesson: Glass Lab: Ex2: Review Field sketching CKB Mat Lab Glass samples	<i>Materiality in Interior Construction</i> Chapt. 1: pp. 1-48 REVIEW FOR MID-TERM EXAM	
Oct 9		MIDTERM Lab: How green is your countertop?	<i>Handout:</i> <i>LCA: Workflow Data You Can Trust</i>	EX3_ESD Orgs <i>Due: Oct 23</i>

Oct 16

Guest Lecture: **Lifecycle Assessments**

EX3_Preparation

Oct 23

Student Presentations: **EX3_ESD Orgs**
(6 of 11)

Video: Blue Vinyl

Materiality in Interior Construction

Chapt. 2: pp. 64-69

pp. 104-130

pp. 174-189

Chapt. 5: pp. 346-355

Oct 30

Complete EX3 student presentations
(5 of 11)

Lesson: **Plastics + Composites**

Materiality in Interior Construction

Tile: pp. 88-103

Stone: pp. 149-164, 268-271, 315-317, 256-358

Terrazzo: pp. 165-173

EX4_Material Model

Due: Nov 13

Nov 6

Class Trip: Material Connexion

Nov 13

Guest Lecture: **Wall Coverings**
Wolf Gordon | Larry Shagawat
Lab: EX4 Review

Materiality in Interior Construction

Wall coverings: pp. 232-233, 272-280

Handout:

Interior Design Materials & Specifications

Chapter 19: Wallcoverings

Chapter 23: Upholstery

Chapter 26: Drapery

Nov 20

No Class

Thursday Schedule before Thanksgiving

Materiality in Interior Construction

Nov 27

Read Comp
Quiz 5

Lesson: **Tile**
Lab: Mat Lab stone samples

Chapt. 2 pp. 74-86

EX5_Drapery Calcs

Due: Dec 04

Materiality in Interior Construction

Dec 4

Lesson: **Textiles**
Lab: Mat Lab carpet/textile samples
Review for Final Exam

Dec 11

Review for Final Exam