

Research Methods
ARC 5012
(online)

Instructor:

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Course Meetings:

See Course Schedule.

Prerequisites:

Graduate Standing

Catalog Description:

Intensive study of research methodologies to familiarize students with a variety of research methods. Recent and ongoing research in environmental design and behavioral sciences, and methods being used in contemporary design issues. Utilizes computer applications in design research. Sources include educational, government, professional and legal environments and private sector.

Course Content:

The course will be conducted in a seminar format via Blackboard. Students and faculty will be responsible for developing a schedule of seminar topics. Students are expected to review lecture slides and to complete reading assignments relevant to seminar sessions prior to “attending” the virtual class, in order to facilitate discussion. Students will work as “consultants” to help classmates with their research in virtual class discussions. Contribution to the class will be considered in course evaluation.

Course Objectives:

1. Examination of research applications in the architecture and interior design fields
2. Development of research concepts
3. Development of research proposals
4. Application of research methods in architectural and interior design research
5. Ability to read and evaluate architectural and interior design research
6. Ability to systematically search the relevant literature to support a research or thesis topic
7. Dissemination of research results in written, verbal, and multi-media formats

NAAB Criteria:

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|------------------|--|
| Primary Focus: | 2. Critical Thinking Skills
4. Research Skills |
| Secondary Focus: | 1. Speaking and Writing Skills
7. Collaborative Skills
8. Western Traditions
9. Non-Western Traditions
10. National and Regional Traditions
11. Use of Precedents
12. Human Behavior
13. Human Diversity
16. Program Preparation
17. Site Conditions
26. Technical Documentation
30. Architectural Practice
31. Professional Development |

Required Text:

Borden, I., & Ruedi, K. (2006). *The Dissertation: an architecture student's handbook* (2nd ed.). Oxford, England: Architectural Press.

Recommended Text:

This list of references will be updated as new material is found during the semester

American Psychological Association (1994). *Publication Manual of the American Psychological Association*. Washington, DC: APA

Bechtel, R., Marans, R., & Michelson, W (1987). *Methods in environment and behavior research*. New York, NY: Van Nostrand Reinhold.

Borden, I., & Ruedi, K. (2005). *The Dissertation: an architecture student's handbook*. Oxford, England: Architectural Press.

Cresswell, J.W. (1994). *Research design: quantitative and qualitative approaches*. Thousand Oaks, CA: Sage Publications.

Deasy, C.M. (1985). *Designing places for people*. New York, NY: Whitney Library of Design

Duerk, D. P. (1993). *Architectural programming: information management for design*. New York, NY: Van Nostrand Reinhold.

Fink, A. (1998). *Conducting research literature reviews*. Thousand Oaks, CA: Sage Publications.

Fowler, F. (1984). *Survey research methods*. Thousand Oaks, CA: Sage Publications.

Gifford, R. (2002). *Environmental psychology: principles and practice*. 3rd ed. Colville, WA: Optimal Books.

Groat, L., & Wang, D. (2002). *Architectural Research Methods*. New York, NY: John Wiley & Sons

Kidder, L. et. al. (1986). *Research methods in social relations*. 5th ed. Orlando, FL.: Holt, Reinhart and Winston.

Herman Miller Research Corporation (1973). *The university of Massachusetts dormitory experiment*. Ann Arbor, MI: Herman Miller Research Corp.

Hiers, J.T. et. al. (1986). *The research paper: sources & resources*. Lexington, MA: D.C. Heath & Co.

Leedy, P. (1993). *Practical research: planning & design*. New York, NY: MacMillan Publishing Company.

Locke, L.F., Silverman, L.J., Spirduso, W.W. (1998). *Reading and understanding research*. Thousand Oaks, CA: Sage Publications.

Locke, L.F., Spirduso, W.W., Silverman, L.J. (1993). *Proposals that work*. Newbury Park, CA: Sage.

Miner, L. E., et. al. (1998). *Proposal planning & writing*. Phoenix, Ariz: Oryx Press.

Pena, W. (1987). *Problem seeking: an architectural programming primer*. Houston, TX: CRRS, Inc.

Roth, A. (1989). *The research paper: process, form, and content*. 8th ed. Belmont, CA: Wadsworth Publishing Co.

Snyder, J.C., (1984). Architectural research. New York, NY: Van Nostrand Reinhold Company, Inc.

Turabian, K.L. (1996). A manual for writers of term papers, theses, and dissertations. 6th ed. Chicago, IL: The University of Chicago Press.

Veitch, R., Arkkelen, D. (1995). Environmental psychology: an interdisciplinary perspective. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Warwick, D., Linnger, C. (1975). The sample survey: theory and practice. McGraw Hill.

Weidenborner, S. et. al. (1982). Writing research papers: a guide to the process. New York, NY: St. Martin's Press.

Weiss, C. (1972). Evaluation research. Englewood Cliffs, NY: Prentice-Hall, Inc.

Zeisel, J. (1981). Inquiry by design. Melbourne, Australia: Cambridge University Press.

Zube, E. (1980). Environmental evaluation: perception and public policy. Melbourne, Australia: Cambridge University Press.

Grading:

Lawrence Technological University standard grading system:

Letter	Descriptor	GPA	Percentage
A	Excellent	4	96-100
A -	Very Good	3.7	90-95
B +		3.3	87-89
B	Good	3	83-86
B -		2.7	80-82
C +		2.3	77-79
C	Satisfactory	2	73-76
C -		1.7	70-72
F		0	

Please refer to Appendix of this syllabus for the complete Meaning of Grades.

Blackboard Web Page:

There exists a web page upon which a semester calendar, assignments, important data, and announcements will be posted for all to use. The address is <http://my.ltu.edu>, and it may be accessed from any computer with an Internet connection. Students are urged to check the site regularly, as well as their LTU e-mailboxes. Please make sure that your preferred email address is the one registered on the Blackboard site (myLTU/Personal Information/Edit personal Information).

Virtual Class Participation Policy:

Requests for medically-excused absences (i.e., lack of participation via Blackboard Discussion Board Forums) must be accompanied by a doctor's note to be considered excused virtual class absences. The participation/attendance component of the final grade will be computed as follows, and will be altered as appropriate to reflect participation in virtual class discussions (see also **Course Assignments**):

- 0 Absences = A (participated in Blackboard Discussion Board more than once during each week for the entire semester)
- 1 Absence = B (no participation in Blackboard Discussion Board during one week or one module)
- 2 Absences = F (no participation during two weeks)
- 3 Absences = Final Course Grade F (no participation during three weeks or more)

LTU Academic Honor Code:

Academic integrity and honesty are basic core values of Lawrence Technological University. In carrying out its academic mission, Lawrence Technological University, like all universities, depends on the honesty and integrity of its faculty, staff, and students, and for this reason every member of the Lawrence Technological University community is charged with upholding the Academic Honor Code. Actions that breach the Code erode the trust of those who look to universities for honest evaluations of academic work arrived at through honest processes. Violations may also cause individual harm in that reports of performance made to post-graduate schools, professional societies, and employers would inaccurately represent a student's progress. Lawrence Technological University is committed to creating an academic community that values both individual and collaborative efforts that promote learning and discovery. Such a community expects honesty and integrity in the work of all its members. The Academic Honor Code speaks to the work of individual students within the community. It should not be construed as arguing against the important collaborations that also occur among students on campus.

Students, faculty, and staff are expected to follow established standards of academic integrity and honesty. Academic misconduct entails dishonesty or deception in fulfilling academic requirements and includes but is not limited to cheating, plagiarism, or the furnishing of false information to the University or a University affiliates in matters related to academics. An affiliate of the University is any person, organization, or company who works in conjunction with Lawrence Technological University for the purposes of assisting students in fulfilling their academic requirements. It is therefore this institution's stated policy that no form of dishonesty among its faculty or students will be tolerated. Although all members of the University community have an obligation to report occurrences of dishonesty, each individual is principally responsible for his or her own conduct.

Full text of the LTU Academic Honor code can be found at:
http://www.ltu.edu/currentstudents/honor_code.asp

Plagiarism:

Before you start to accumulate notes for your research paper, ideas for your design project or share your project with a friend to help them out, ask yourself if you fully understand what constitutes plagiarism. At one extreme is the gross offense of trying to pass off as one's own the exact words of another; at the other extreme is the subtle matter of "borrowing" a fine phrase, drawing, or diagram to dress up one's own writing or project. Through ignorance a student may in all honesty misuse his/her sources in such a way that he is guilty of plagiarism; but he/she is nonetheless guilty.

An analogy to other kinds of dishonesty may help. To use another's words or ideas is roughly the equivalent of stealing the funds of a fraternity for one's own use. However, funds are made up of concrete money; words and ideas are abstract, and consequently the line between honest and dishonest use may be harder to define. There are, of course, correct and honorable ways of borrowing money. Forms of acknowledgment have to be included with your use of source material in the same way that legal forms have to be filled out before a bank will let you use its money.

Examine the following discussion of degrees of plagiarism:

1. Word-for-word plagiarism. This includes (a) the submission of another student's work as one's own; (b) the submission of work from any source whatever that is not properly acknowledged by parenthetical citation and/or reference in the paper itself; (c) the submission of any part of another's work without proper use of quotation marks.
2. Patchwork-quilt plagiarism. As our grandmothers used to put together large quilts out of scraps of cloth, a student may make the mistake of passing off as an original paper one that is stitched together from phrases and sentences taken from his sources. If he/she does not include quotation marks around all such borrowings, he/she is committing plagiarism. Mere rearrangements of phrases into a new pattern does not confer originality.

3. Unacknowledged paraphrase. An author's discovery of fact or original interpretation of fact is as much his property as his exact words are. Restatement by paraphrase means you must give credit to the original sources in parenthetical citations.

-- adapted from the Harbrace Guide to the Library and Research Paper, by Donald A. Sears, pp. 38-39.

From Lawrence Institute of Technology Catalog, pg 17:

"Academic dishonesty includes plagiarism, cheating, forgery, or other acts that deceive or defraud in regard to a student's own academic work or that of others. Questions of academic dishonesty are reviewed by the Dean of the School responsible for the courses in which they occur. When necessary, cases of academic dishonesty may be referred to the Student Discipline Committee. The usual penalty for academic dishonesty is failure in the course on the first offense and expulsion from the College on the second offense."

-- full text adapted from the LTU College of Arts & Science documents. More information and full text is located at: http://www.ltu.edu/arts_sciences/humanities_ss_comm/plagiarism.asp

Retention of Student Work:

As noted in the University's graduate catalog, "all two and three dimensional drawings, as well as reports and other written studies submitted in satisfaction of any required or elective courses become the property of the University. When such work is kept, arrangements will be made for the student to receive suitable photographic copies as a record of his or her design work." Exemplary examples of student work may be retained for Open House, for accreditation visits, for Honors exhibitions, or as examples for future classes.

A Word on Graduate Courses:

Many students go through a bit of culture shock during their first graduate level courses. It should be recognized that there must be a significant difference between undergraduate and graduate level coursework. Graduate school is the first major step that students will take in transitioning from student to professional, and individuals making that journey must exercise a higher level of self-directedness than they have in the past. If the undergraduate years are when a student learns the tool of their trade, graduate education is the time when individuals develop the ability to perform as leaders in their chosen field of study. Graduate students often complain that instructions are 'vague', and compared to undergraduate coursework, they are. Beginning design students need tightly-structured project statements and submittal requirements, as they have not had the necessary experience to identify problems and the means to present their solutions. Practicing architects carry the responsibility to create the project program, and to determine what is needed to communicate their design ideas to the client and users. Graduate students are required to draw upon their experience to make significant decisions which will influence the scope of both the projects and the necessary level of communication. Expectations are higher, both in terms of student output and the level to which students are engaged in the form their education will take. The challenge is laid before you – it is time to take that step.

Course Schedule and Requirements:

Weekly Schedule

Module 0: Week of May 12 – 18

Information on the use of Blackboard (see also **Blackboard Web Page** as given in an earlier part of the syllabus)

- All lectures (PowerPoint slides) are uploaded to Blackboard Modules.
- A lecture, Discussion Board Forum topics, and other course materials for a weekly module are posted to Blackboard on Monday (first day of a weekly module). Some materials may have to be posted after Monday pending their availability.
- Assignments are posted to Blackboard Assignments.

Online course general requirements

- Evidences of your virtual class participation in each weekly module will have to be documented by you (i.e. by participating in a Blackboard Discussion Board Forums) anytime from the first day (Monday) of a given module (when the course materials for that module are announced) through 6 pm on the last day (Sunday) of that module.
- Everyone is required to participate via Blackboard Discussion Board in weekly virtual classroom discussions on the questions raised or issues covered in a weekly lecture, assigned readings or any other course materials.
- When participating in a Discussion Board Forum, everyone must practice civil and professional behavior, must treat everyone with sense of respect, and must avoid using offensive language of any type.
- The instructor's final check on Discussion Board for a weekly module will be performed at 6pm on the last day of each module to examine the overall quality and level of everyone's participation in a weekly module for its entire week
- All assignments are due on Sunday (the final day of a module) at 6 am via Blackboard unless otherwise instructed. No email submission is acceptable. There will be times when additional materials (e.g., hard copies) are required for NAAB accreditation purposes.
- It is your responsibility to make sure your Blackboard works by checking with school PRIOR to the start of the semester.
- To remain up to date, check Blackboard Announcements a few times a day for any updates or any new information.

Assignments and course materials for Module 0 announced: Due Sunday May 18 at 6 pm

- Assignment of "Information About Yourself and Potential Final Research Topic" (the form and instruction to be posted to Blackboard Assignments): This is part of the participation, contribution, presentations, dedication, professional conduct grade.
- Lecture and discussion: Introduction to the course

Module 1: Week of May 19 – May 25

- Lecture and discussion: General questions about research

Module 2: Week of May 26 – June 1

- Lecture and discussion: Understanding research and writing a research proposal
- Assignment of research proposal (Project 1): Due June 1

Module 3: Week of June 2 – June 8

- Lecture: Library orientation by LTU library staff (tentative)
- Lecture and discussion: Research steps and literature review
- Assignment of literature review (Project 2)
- Faculty comments and grades for Project 1 posted on June 8

Module 4: Week of June 9 – June 15

- Lecture and discussion: Data collection methods (I)

- Lecture and faculty presentation: Research examples, procedures, strategies (I)
- DUE June 15: literature review

Module 5: Week of June 16 – June 22

- Lecture and discussion: Data collection methods (II) and guidelines for writing a final research paper
- Lecture and faculty presentation: Research examples, procedures, strategies (II)
- Assignment of final research paper (Project 3)
- Faculty comments and grades for Project 2 posted on June 22

Module 6: Week of June 23 – June 2

- Lecture and discussion: Data analyses
- Lecture and faculty presentation: Research examples, procedures, strategies (III)

Module 7: Week of June 30 – July 6

- Lecture and discussion: Writing/documenting
- Lecture and faculty presentation: Research examples, procedures, strategies (IV)
- Assignment of poster for final research project

Module 8: Week of July 7 – July 13

- DUE July 13: Draft of final research paper (part of participation, contribution, presentations, dedication, professional conduct grade)
- Lecture and faculty presentation: Research examples, procedures, strategies (V)

Module 9: Week of July 14 – July 20

- DUE July 20: Poster for final research project (optional for extra credit)
- Faculty comments on draft of research paper posted on July 20

Module 10: Week of July 21 – July 24 (final exam week)

- Work week
- DUE July 24, 6 pm: Final research project paper

Course Assignments/Grading Policies:

Your grade in this class will be based on the following:

- Class assignments (80%): Projects turned in late will be marked down one-half grade per each calendar day that they are late. Incomplete projects will not be accepted.

Projects:

The assignment guidelines providing more information on each project will be distributed at the appropriate times.

Project 1: Research Proposal (10%)

Project 2: Literature Review (30%)

Project 3: Final Research Paper (40%)

[Poster (optional for extra credit): A poster typical of conference presentations will be prepared to illustrate research results from Project 3]

- Virtual classroom participation, contribution, presentations, dedication, professional conduct (20%)
All students are expected to be active participants in all aspects of virtual classroom discussions and critiques via Blackboard Discussion Board Forums.

These factors will be weighed at the discretion of the instructor. See the attached document on the meaning of grades.

Meaning of Grades:

<p>A A-</p>	<ul style="list-style-type: none"> • This is the highest category reserved for clearly exceptional work with provocative/unique/creative thesis • A thorough, deep, and precise understanding of issues and arguments developed in the class and a foundation of extensive knowledge is evident. • Outstanding capacity of analysis and critical thinking is illustrated • Skillful use of concepts and/or materials from literature and previous work in the area • Integrations, analysis, theory, and academic writing, etc., are carefully woven in. • High clarity and finesse of communication and presentation is evident.
<p>B+ B B-</p>	<ul style="list-style-type: none"> • A demonstration of good to very good understanding of issues and arguments in the class is evident. • Ability to analyze and think critically is demonstrated • Demonstrating capacity to use the appropriate concepts and/or materials from literature and previous work in the area • Integration, analysis, theory, and academic writing, etc, have generally been well addressed. • There is good clarity and finesse of communication and presentation.
<p>C+ C C-</p>	<ul style="list-style-type: none"> • This category represents an average satisfactory and adequate achievement commensurate with the basic standards of the course work. • An average understanding of issues and arguments developed in the class is evident. • Demonstrating an adequate understanding of the subject matter, an ability to handle relatively simple concepts/materials. • Integration, analysis, theory, and academic writing, etc., are also reasonably addressed and there is a reasonable clarity of communication and presentation. • Generally all issues being well met but, one element, such as critical analysis or writing lacks development, could justify assessment in this range. • It is not meant as an "easy" category of accordance. Completing all the assigned work does not automatically place assessment in this range.
<p>F</p>	<ul style="list-style-type: none"> • Failed. This grade signifies that the student must repeat the subject to receive credit. • Performance in this category does not demonstrate minimum levels of achievement and understanding commensurate with the basic standards of the course work.
<p>I</p>	<ul style="list-style-type: none"> • This must be petitioned for by the student and applied for by means of a form jointly filled out by the student and instructor; and submitted with the final grades. • The circumstances must be dire and documentable, and the student must be doing passing work at the time. • The work needs to be completed with 4 weeks following the end of the semester.