

ARCH 694:
Research Publication
Methods for Building
Science



Douglas Noble, FAIA, Ph.D.
dnoble@usc.edu

Chase L. Leavitt
Graduate Building Science

School of Architecture
University of Southern California

ARCH 694:
Research Publication Methods for Building Science

Sample Syllabus
Friday 12-2pm, Watt 312
2 Units

Introduction and Purposes

This course covers technical documentation, graphic representation, and verbal presentation for writing and presenting journal articles and conference presentations in building science.

Many careers in the building sciences involve technical research. Professionals will be required to prepare technical reports, journal articles and conference presentations describing the results and potential of their research. To help prepare students for these careers, this course will expose students to the processes of developing a journal paper and a conference presentation.

Introduction to Research Publication

Identifying Appropriate Journals and Conferences

Writing Style - Technical Research Papers

Graphic Representation of Information in Building Science Publications

Types of Research Papers

The Hypothesis and Abstract

Paper Submissions and Review Processes

Drawing Appropriate Conclusions

Citing, Sourcing, Over-claiming and Plagiarism

Elements of Successful Conference Presentations

Defining and Writing for the Appropriate Audience

Course Requirements and Grading

Recommended Preparation: Completion of MBS Core Seminars

Graded: Letter Grade



3d Clipper

CAD Lab for Instruction,
Professional Partners,
and Electronic Research

Schedule

Week

- 1 Lecture: Introduction to Research Publication
Assignment: Critical Reading of three assigned journal papers
Reading: Critical comparative commentary on three journal articles
(varies by student)
- 2 Lecture: Identifying Appropriate Journals and Conferences
Elements of the Chicago Style
Reading: The Chicago Manual of Style (online)
Assignment Due: Critical Commentary on three journal articles
Assignment: Select Term Paper topic and bibliography
- 3 Lecture: Writing Style - Technical Research Papers
Readings: Individually selected books and journal articles for topic
Assignment Due: Term Paper topic selection and bibliography
(Chicago Style)
- 4 Lecture: Graphic Representation of Information in Building Science Publications
Reading: Edward Tufte, *The Visual Display of Quantitative Information*
Assignment: Five graphic Illustrations
- 5 Lecture: Types of Research Papers
- 6 Lecture: The hypothesis and abstract
Assignment Due: Five graphic Illustrations
- 7 Lecture: Paper submissions and review processes
Assignment Due: Hypothesis and abstract
- 8 Lecture: Drawing appropriate Conclusions
Assignment Due: First Draft of Journal Paper
Assignment: Attending a conference (critical commentary)
- 9 Lecture: Citing, Sourcing, Overclaiming and Plagiarism
- 10 Lecture: Elements of Successful Conference Presentations
Reading: Edward Tufte, *The Cognitive Style of PowerPoint*
- 12 Lecture: Defining and Writing for the Appropriate Audience
Assignment due: Attending a conference (critical commentary)
- 13 Conference presentation practice presentations
- 14 Conference presentation practice presentations
- 15 Lecture:
Final Journal Paper Due

Final Exam:

Conference Presentation (videotaped)

Statement on Academic Conduct and Support Systems

Academic Conduct

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards* <https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct/>.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <http://equity.usc.edu/> or to the *Department of Public Safety* <http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us>. This is important for the safety whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* <http://www.usc.edu/student-affairs/cwm/> provides 24/7 confidential support, and the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

Support Systems

A number of USC’s schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* <http://dornsife.usc.edu/ali>, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* <http://emergency.usc.edu/> will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.