INTRODUCTION
This course aims to have students develop an understanding of and competence in behavioral research and evaluation as applied to urban planning and studying the relationship between persons and their socio-physical surroundings. Students will explore concepts, methods and skills; and learn about issues in research design, validity, reliability, data gathering techniques, analysis, study evaluation, and report writing.

COURSE OBJECTIVES
Upon completion of the course, the student should be able to:

- Critically evaluate empirical research products
- Create attitude scales for planning or urban design
- Observe and record behavior or its trace in relation to physical environment
- Design, conduct, analyze and derive policy implications from a behavior-planning/urban design study
- Describe in writing a study of a specific behavior-urban planning/design issue

REQUIRED TEXT

CLASS PROCEDURE
Classes discuss readings and research methods. For those discussions, students are expected to read articles each week so they can take part in the lecture/discussions. During the quarter, students will conduct various small research projects, and complete one empirical study from initiation to writing up the results.

ACADEMIC MISCONDUCT
In accord with university policy, plagiarism will not be tolerated in the classroom. Plagiarism is passing off as one’s own ideas, words, writings, etc., which belong to another. You are committing plagiarism if you copy the work of another person and turn it in as your own, even with the permission of that person. Any instances of academic misconduct will be reported to the Committee on Academic Misconduct (University Rule 3335-5-487)

Disability Statement
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific
needs. Please contact the Office for Disability Services at 614-292-3307 in room 150 Pomerene Hall to coordinate reasonable accommodations for students with documented disabilities. Additionally, contact the instructor as early as possible in the quarter, so your disability can be properly accommodated.

GRADING
Grades are based on the student's performance in meeting the course objectives assessed as follows:

1. Each week you should read and come prepared to discuss and ask questions about required readings.

2. PROJECTS (due start of class)
   - DUE Jan. 21, Beauty is Talent (5 points)
   - DUE Jan. 28, Data gathering. Each student is to obtain at least three (3) on-line responses to scales (URLs and instructions to be provided) (10 points)
   - DUE Feb 4, Bring in and post on Carmen discussion a scale from popular media (0 points)
   - DUE Feb 11 Scale Development (15 points)
   - DUE Feb 18 Feeling report for discussion in class (0 points)
   - DUE Feb 25 Discussion of paper (15 points)
   - DUE March 18 Unobtrusive measure of behavior (15 points)

3. FINAL PROJECT. You are to conduct and write up an empirical study. The write-up should follow the guidelines in the Hoyle chapter on writing up the report, and include sections describing the background rationale (brief), the method, the results, and conclusions (in which you critically appraise the study, derive policy, research, and design implications. Grade will also include your efforts in gathering, coding and analyzing the data (40 points).
   - DUE: Finals Week, Wed. April 23, 8:00 a.m.

Instructor will grade each of your efforts as follows:

<table>
<thead>
<tr>
<th>Excellent performance; equal or above &amp; beyond assignment requirements</th>
<th>Fair to good performance; from doing minimal work to striving for excellence</th>
<th>Poor performance; did less than minimal work</th>
<th>Reject: inadmissible evidence</th>
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<tbody>
<tr>
<td>A 94-100</td>
<td>B+ 87-89.9</td>
<td>C+ 77-79.9</td>
<td>D+ 67-69.9</td>
</tr>
<tr>
<td>A- 90-93.9</td>
<td>B 83-86.9</td>
<td>C 73-76.9</td>
<td>D 60-66.9</td>
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<tr>
<td></td>
<td>B- 80-82.9</td>
<td>C- 70-72.9</td>
<td>E &lt; 60</td>
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</table>

All assignments are due at the START of the class period when due. Late submissions will lose points as follows:
- If late by up to 24 hours, lose 1 grade-point (i.e. A goes to B);
- if late 24-48 hours, lose 2 grade-points (i.e. A goes to C);
- If later than 48 hours, no credit, E.

Instructor reserves the right to reward bonus points to students for class participation or exceptional work.
COURSE OUTLINE

First Week (Tue. Jan. 7) DISCUSSION: Introduction - What is this class about? How will it operate? Introduction to behavioral research and its rationale for environmental design. Some environment - behavior issues.

Second Week (Tue., Jan. 14) DISCUSSION: Ways of knowing, ordinary vs. scientific; reliability, validity; maximizing construct, internal, & external validity; formulating hypotheses;
DUE (Start of class) Read Hoyle et al.
Ch. 1. Ways of Knowing (pp. 3-21)
Ch. 2. Evaluating Social Science Theories and Research (pp. 23-44)

Third Week (Tue., Jan. 21) DISCUSSION Ethical principles Deception, confidentiality, anonymity, participant observation, costs and benefits, review process
DUE (Start of class) Read Hoyle et al.
Ch. 3 Ethical Principals
Submit write-up of Beauty is Talent study (1 page, 5 points)
For the abstract of the study below report in one page single-spaced memo (1 inch margins, 12 point font) From: Your name (1 points):
* What constructs do the authors believe they are measuring and how accurately do you think the constructs have been measured? (1 points)
* Do you believe that the causal conclusions drawn by the authors are legitimate ones? How might these conclusions be biased? (1.5 points)
* Are their findings generalizable? To whom? Are there any problems or limitations in generalizing? (1.5 points)

Beauty is talent: Task evaluation as a function of the performer's physical attractiveness

Abstract

Male college subjects read an essay that supposedly had been written by a college freshman co-ed. They then evaluated the quality of the essay and the ability of its writer on several dimensions [by making ratings along a number of 9-point scales]. By means of a photo attached to the essay, one third of the subjects [randomly assigned] were led to believe that the writer was physically attractive and one-third that she was unattractive. The remaining subjects read the essay without any information about the writer's appearance. In addition, one-half of the subjects [randomly assigned] read a version of the essay that was well written while the other subjects read a version that was poorly written . . . The subjects who read the good essay evaluated the writer and her work more favorably than the subjects who read the poor essay. The subjects also evaluated the writer and her work most favorably when she was attractive, least when she was unattractive, and intermediate when her appearance was unknown. The impact of the writer's attractiveness on the evaluation of her and her work was most pronounced when the "objective" quality of her work was relatively poor.*
Fourth Week (Tue., Jan. 28) DISCUSSION. Beauty is talent, measurement, operational definitions, tests for reliability, validity, multi-method multi-trait matrix. Interview techniques.

UE (Start of class) Read Hoyle et al.
Ch. 4. Fundamentals of Measurement (pp. 75-95)
Ch. 5: Models of measurement (pp. 96-120)

Data Gathering: Obtain at least three (3) responses to on-line scale development survey (URLs and instructions to be provided in earlier class (10 points)

Fifth Week (Tue., Feb. 4) DISCUSSION: Data gathering continued: question wording, sequence, interviewing. Questionnaires, Thurstone, Likert, Guttman Scales, semantic differential, q-sort, response to simulation (trade off games, games, models), time budget, psycho-physiological measures. 11-item scale to evaluate. Get 5 responses to it.

DUE (Start of class) Read Hoyle et al.
Ch. 6. Single-Item Measures in Questionnaires (pp. 121-151)
Ch. 7. Scaling and Multiple-Item Measures (pp. 162-178)

Bring to class (and post in discussion area) a scale found in popular media (magazine, newspaper, blog) for discussion.

Sixth Week (Tue., Feb. 11) DISCUSSION: Sampling, probability, non-probability and experience sampling

DUE (Start of class) Read Hoyle et al.
Ch. 8 Fundamentals of Sampling (pp. 181-196)
Ch. 9 Probability Sampling Methods (pp. 197-213)
Ch. 10 Experience Sampling (pp. 214-232)

Write-up of three scales (15 points). Develop, write up and submit a Likert, Guttman (cumulative) and Thurstone (summative) scale, each with five items measuring a planning construct of interest to you, such as sense of community. You need NOT test or validate the scales. (memo format, up to three pages. 5 points per scale)

Seventh Week (Tue., Feb. 18) DISCUSSION: Experiment design & settings.

DUE (Start of class) Read Hoyle et al.
Ch. 11 Randomized experiments (pp. 237-267)
Ch. 12 The laboratory setting (pp. 270-305)
Ch. 13 Nonrandomized designs (pp. 307-330)

For class discussion, each student is to post on Carmen discussion and bring to class report for one day for feeling rushed (either systematic—every two hours; diary—at lunch and before bed; random—6-8 times; or event contingent)

Eighth Week (Tue., Feb. 25) DISCUSSION: Applied research. Evaluation (POE, Programming), observing behavior, obtrusive and unobtrusive approaches - photography, participant observation, physiological measures, ecological approaches, physical traces, archives, content analysis, and non-verbal communications (facial, voice, hands, etc.).

DUE (Start of class) Read Hoyle et al.
Ch. 14: Applied Research (pp. 332-360)
Ch. 15: Observational and Archival Research (pp. 361-393)

Submit discussion of assigned paper covering six dimensions discussed in Ch. 12
regarding types of validity (5), experimental artifacts (such as demand characteristics) (5) and overall conclusions (5) you can draw (15 points)

**Ninth Week** (Tue., March 5) DISCUSSION: Qualitative research, self-employed photography, cognitive mapping, focused interviews, content analysis. Planning the study.
DUE (Start of class) Hoyle et al.
Ch. 16: Qualitative Research (pp. 394-421)

**Spring Break**
Mon. March 10 – Friday March 14

**Tenth Week** (Tue., March 18) Final planning and pilot study
DUE: Write-up of unobtrusive measure of behavior (2 pages, 15 points). Develop and write-up an unobtrusive measure of human behavior. As an individual or in small groups write up a one to two page summary of the unobtrusive measure of behavior.
1. Use memo format as above, but up to 2 pages (1 point)
2. Select a human behavior that you find especially interesting and state your interest in this phenomenon in a one sentence question (1 point);
3. List the reason(s) for choosing and questioning this phenomenon (i.e. why does it interest you) (1 point);
4. State a hypothesis or expectation (what answer you expect to find); note: you must present the hypothesis in operational terms – the constructs must be measurable; and the hypothesis must make a statement about the relationship between an independent variable (a phenomenon of the environment or of humans) and dependent variable (human behavior) (3 points);
5. Describe your method (what you observed, how, where, when, how long, etc.) (3 points)
6. Present your findings (in numbers, chart form) and whether or not they supported your hypothesis (3 points);
7. If you could start over, what would you do differently to improve the measure (3 points)

**Eleventh Week** (Tue., March 25) DISCUSSION: Unobtrusive measures, data gathering and coding
DUE (Start of class) Hoyle et al.
Ch. 17 Data Management and Exploration

**Twelfth Week** (Tue., April 1) Doing the analysis. frequency distribution, histogram, stem and leaf diagram, outliers, central tendency (mean, median), distribution (interquartile, standard deviation), other findings.
DUE (Start of class) Hoyle et al.
Ch. 18 Estimates and tests of association

**Thirteenth Week** (Tue. April 8) DISCUSSION: Writing up the report
DUE (Start of class):
Read Hoyle et al. Ch. 20: Writing the research report (pp. 510-537).

**Fourteenth Week** (Tue., April 15) DISCUSSION Ongoing work

**Final’s Week** (Wed. April 23, 8:00 a.m.)
**FINAL REPORT DUE** (40 points) You are to conduct and write up an empirical study. The
write-up should follow the guidelines in the Hoyle chapter on writing up the report. It should follow:
1. The hourglass format for the full report and each section (10 points) and present,
2. A five to seven word title and up to 125 word abstract summarizing the research question, expectation, method, results, conclusions (2 points),
3. A brief (one to three sentence) Introduction which presents the background rationale, independent and dependent variable and your hypothesis or expectation (2 points),
4. Methods (12 points),
   a. Participants (and their characteristics, such as percent male and female)—4 points
   b. Stimuli (if used), conditions or settings tested – 4 points
   c. Instrument – 4 points
5. Results (12 points)
   a. Restate hypothesis and whether or not the data support it – 4 points
   b. Statistical analyses – 4 points
   c. Correctly labeled tables and figures illustrating the results and referred to in the text – 4 points
6. Conclusions (12 points)
   a. critically appraise the study for internal and external validity — 4 points
   b. present directions for future research — 4 points
   c. present directions for policy and planning or design – 4 points.

ADDITIONAL RESOURCES
Books

Journals
Journal of Environmental Psychology
Environment & Behavior
Environment & Planning B
Journal of Planning Literature
Journal of Architecture and Planning Research
Landscape and Urban Planning
Journal of the American Planning Association
Journal of Social Issues
Journal of Urban Design
Human Factors

Databases
Active Living Research Database
Dissertation Abstracts
Google Scholar
Thompson Reuter ISI (Social Science Citation Index)
Psychology Abstracts