CLASS ROOM AND TIME

Tuesdays, 9am -12pm in Business Building Room 218

INSTRUCTOR

Tim Pollock  Office: 417 Business Building
Phone: 814-863-0740 (office)
Email: tpollock@psu.edu (the best way to reach me and the first
option you should try)
Office Hours: Thursdays, 1:00-2:30 and by appointment

OBJECTIVES

By excelling in this course, you'll build your core set of skills as a Ph.D., those that involve how we come to 'know' things in the social and behavioral science of organizations. That is, you'll have the foundation necessary to do three essential tasks as a doctoral-level professional:

(a). Communicate about empirical research with the community of scholars in your field using a common language of methodological principles,

(b). Evaluate (critically review) the methods used in empirical studies -- for yourself, for students and peers seeking feedback, or for journal editors, and

(c). Design your own research (including a dissertation!) to maximize the possible knowledge to be gained from it, while at the same time recognizing its inherent limitations.

CONTENT

Specifically, this course gives you a chance to learn about the toolbox of research strategies, designs, and operations you can use, as well as the strengths and weaknesses of each one. We'll repeatedly return to a '3C' theme of methodological choices, constraints, and compromises. By the end of the term, you should get a full appreciation of the complexity of those choices (and how such complexity is typically hidden from plain sight in published articles). You should also get a basic appreciation of how those choices are affected by external factors and by each other. Each reasonable choice trades off some handsome advantages against some ugly disadvantages. There are boatloads of bad methods. However, there is no, one, best method for trying to answer a scientific question. Our ongoing premise will be that knowledge about organizational phenomena accrues only through a triangulation of methods, each with its own inherent strengths and drawbacks.

Each week we will examine a stage or a step in the research process. We'll start the semester with an overview of that process, and then move to choices in framing "researchable" problems, as well as the hypotheses or theories one might use to address them. Over the length of the semester we'll use the 3Cs framework to understand many different design steps. They include formulating: theories or hypotheses, general research strategies, specific designs (and the validity threats posed by each approach), operationalization and measurement techniques, ways to convert raw observations into numerical data, statistical approaches (from an outside-in rather than an inside-out perspective; this won't be a statistics class), and ethics.
in the scientific process, including choosing conclusions from one's results. Yes, "choosing" conclusions.

This course was developed jointly with the marketing department at Smeal, and is focused squarely on helping you prepare for a career in a research-oriented academic institution where you publish studies about organizational phenomena. Throughout the semester, we'll discuss aspects of what it means to work as a professor and the skills necessary for doing so. We'll have a lot to mull over regarding the publication process, and I encourage you to ask questions about that at any time.

PREREQUISITES

This course covers a lot of difficult, abstract material. It is designed for Ph.D. students in various administrative sciences, or anyone who will be conducting organizational research. Although the course is not primarily about statistics, we will discuss some statistical procedures in a fairly broad, top-down way. Statistics are just one (large) set of tools in your research toolkit. All students should have taken and had no trouble with a graduate-level statistics course, specifically, one that covers the basics of linear regression. Most MBA programs or masters' programs in science or engineering have such a course. A final prerequisite is an open mind and a high initial interest in doing research. As you've probably been told, a Ph.D. is a research degree. Those who learn it have a responsibility to add to what is known about the world, and to pass that knowledge along to others in a lucid way.

TEXTBOOKS & READING MATERIALS


McGrath, J.E., Martin, J., & Kulka, R.A. 1982. Judgment Calls in Research. Beverly Hills, CA: Sage. (referred to as MMK; It's out of print, but the pdf is on your CD)

CD containing a variety of chapters and articles all in pdf format.

FORMAT

Like my attire, my teaching style is pretty informal. However, unlike my OT content seminar, I'll spend most of each session lecturing, with significant time spent on class discussions. Get in on those discussions, but don't do so just to mark your 'air time;' this is not an MBA class. Participation in intellectual conversation is an important part of your grade and more importantly, your education. Take the opportunity to further your understanding of the issues. The question you ask will likely help the other students in class. As you'll read about below (see 'Grades'), our discussion will depend in part on a priori questions you ask and circulate after reading the assigned chapters or articles. Finally, please don't come to class late or leave early. There is only one door and there are not many people in class; to them, it is distracting, disruptive and oftentimes just rude.

EXPECTATIONS FOR CLASS PERFORMANCE

CLASS CONTRIBUTION: Class contribution will make up 30% of your grade. Contributions are made both through the questions you ask and the answers you provide. As much as I love the dulcet tones of my own voice, it is important that you also actively participate in the conversation. In order
to do so, you need to show up regularly and on time to class and not leave early. Attendance problems will keep you from doing well.

**DISCUSSION QUESTIONS:** Each week I will email you a discussion question to help you prepare for the next week's class. I will expect you to have prepared an answer to this question that you will be ready to discuss in class. Each week I will pick a different person to lead off the discussion of the question. If you have not adequately prepared an answer to this question and are called on, not only will it be embarrassing for you, it will affect your class contribution grade. To prepare for these discussions you'll need to read the assigned materials. I've tried to keep those materials from being too "thick." That is, articles and chapters stuffed with Greek symbols have been kept to a minimum. Still, there is a pretty stiff quantitative backbone to what we'll be discussing. The Cook and Campbell terminology can be especially difficult. Note now that we'll be covering it in week 4. *Read to get the big picture. Ask questions to fill in the small pictures that make up the big one. Read with applications in mind.*

**EXERCISES:** There will be two take-home exercises that I'll grade. **Each is worth 20%** of your grade and each will be designed to further embed and illustrate the issues we cover in class. They will be a blend of ways for you to push your final paper forward as well as demonstrate your understanding of the methodological principles we cover. I don't want your semester to be horribly back-end loaded. So, these two assignments will be spread through the term. Your review paper, described below, will be due the last week of class.

**PAPER:** The final paper is worth **30%** of your grade. It isn't just a proposal or "practice" piece. You need to write it in a way that improves its chances of acceptance at a journal or a national conference in your field (including using the proper format and so on). It will involve a review and critique of the theoretical and empirical research (methods used) in a particular area of research in your discipline. The trickiest thing will be to get to the proper scope (not too big, not too small) in terms of the area you're going to cover in the review.

**TAKE-HOME EXERCISES**

The exercises will be take-home assignments dealing with methodological topic(s) we cover in class. They'll also be progressive, building on each other. Their structure should allow you to use the same conceptual domain or phenomenon you want to study in each one. This will help you craft your end-of-semester paper (a research critique) and perhaps even your dissertation. Their format will be a mix of an assignment and something like a comp question. These exercise-exams are due at 9:00 a.m. **two weeks after they are assigned** (i.e., *at the beginning of class*). This will give me enough turnaround time to grade them before the following Tuesday's class, allowing us to discuss them right away. After 9:00 a.m. on Tuesday, the exercises are worth zero points. You can email them to me or give me a hard copy (preferably hard copy, so I don't have to print them) any time up to that point.

**RESEARCH PAPER / METHODOLOGICAL CRITIQUE**

A major purpose of this class is to help you critically review research in your own area of organization science. Therefore, in your paper, you'll comprehensively summarize and critique
empirical investigations that have examined a substantive problem that interests you using a particular conceptual orientation or theoretical paradigm. The conceptual theory or hypothesis must have been examined in at least 30 or more empirical investigations. You will do a careful, exhaustive review and analysis of that published literature. An example of such a critique, although it is much wider and longer than I expect yours to be, is in your supplemental readings: Martocchio and Harrison (1993).

All papers must be prepared according to the format prescribed by your discipline. If you'd like to see an example paper in these format of your discipline, your graduate student colleagues and professors have several of them.

Papers should include a critical view of how investigators have made choices regarding each of the important steps in the research process that we cover in class. What we're really interested in at each step is how much a single methodological choice dominates the research area, and therefore the errors inherent in such a dominant choice, that might underlie general conclusions about substantive phenomena. To reduce some of ambiguity about what these choices or points of criticism are, you can use the Martocchio and Harrison (1993) paper as a very loose guide, and you can take cues from the paper grading sheet that I've attached to this syllabus. The text of the paper (i.e., not counting references, tables, figures, and appendices) should not exceed 25 pages of double-spaced (6 lines per inch, 3 of which contain text), Times-Roman 12-pitch proportional text, with one inch margins. The paper is due by 9:00am on Friday, May 2nd. I do not accept late papers or give incompletes. You will have already written the initial draft by completing the two take-home exercises, so you have no excuses.

We'll talk more about this critique as the semester goes on. As I mentioned above, each of the exercises will also add to the completion of this paper. In past years some students have used the paper to gain deep expertise in a topic area and then publish a meta-analytic summary of the research in that area, using the methodological critique as a guide.

COURSE CALENDAR

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<thead>
<tr>
<th>SESSION</th>
<th>DUE</th>
<th>CONTENT</th>
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<tr>
<td>1 - 1/15</td>
<td></td>
<td>The research process - Idealized vs. garbage can</td>
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<td>2 - 1/22</td>
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<td>Choosing problems, questions &amp; hypotheses</td>
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<td>3 - 1/29</td>
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<td>Positivistic vs. interpretive approaches</td>
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<td>4 - 2/5</td>
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<td>Quasi-experimental designs</td>
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<td>5 - 2/12</td>
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<td>Experimental designs</td>
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<td>6 - 2/19</td>
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<td>Survey designs</td>
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<td>7 - 2/26</td>
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<td>Archival research I</td>
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<td>8 - 3/4</td>
<td>Exercise 1</td>
<td>Archival research II; Using multiple methods</td>
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<td>Spring Break</td>
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<td>9 - 3/18</td>
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<td>Time and methods</td>
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<tr>
<td>10 - 3/25</td>
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<td>Modes of treating constructs; Observation types</td>
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<td>11 - 4/1</td>
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<td>Choosing, developing and evaluating measures I</td>
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<tr>
<td>12 - 4/8</td>
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<td>Choosing, developing and evaluating measures II</td>
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<tr>
<td>13 - 4/15</td>
<td>Exercise 2</td>
<td>Observations and data analysis</td>
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<td>14 - 4/22</td>
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<td>Data analysis and general linear modeling</td>
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<td>15 - 4/29</td>
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<td>(Un)ethical methods</td>
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<tr>
<td>Final Project - 5/2</td>
<td>Due by 9:00am</td>
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Week 1
Idealized Cycle vs. Garbage Can
Writing, Publishing, and Exemplary Methods

(Note: References for required articles are listed in an order that would generate the best understanding)

**MMK:** Ch 1-2 | Ch3: p69-72


(Optional -- Additional Writing and Career Considerations)


Taylor, S.E., & Martin, J. 1988. The present-minded professor: Controlling one's career. In B. Latané and J. Darley (Eds.), *The compleat academic*, (pp. 23-60).


Week 2
Choosing Problems, Questions, and Hypotheses

S&S: Chap. 3


(Optional -- Debates and Perspectives on Organizational Science)


Martocchio, J.J., & Harrison, D.A. 1993. To be there or not to be there?: Questions, theories, and methods in absenteeism research. *Research in Personnel and Human Resources Management, 11*: 259-328. (helpful for your eventual critique, but in a broad way)


Week 3
Ontology, Epistemology, & Philosophy:
Positivistic versus Interpretive Strategies

S&S: Chap 2  
MMK: Ch3 p72-80

*Organization Science*, 2: 342-365

Locke, K., & Golden-Biddle, K. 1997. Constructing opportunities for contribution: Structuring  
intertextual coherence and "problematizing" in organizational studies.  

Suddaby, R. 2006. What grounded theory is not.  


Cacioppo, J. T., Semin, G. R., & Berntson, G. G. 2004. Realism, instrumentalism, and scientific  
symbiosis: Psychological theory as a search for truth and the discovery of solutions.  

**Scandura, T. A., & Williams, E. A. 2000. Research methodology in management: Current practices,  
trends, and implications for future research.  
*Academy of Management Journal*, 43: 1248-1264.**  
**this article is critical as an example of critiquing methods using the frameworks we'll use in class.**

(Optional, inc. advantages of Computational Modeling Strategy)

*Academy of Management Review*, 32(2): 480-499

Harrison, J.R., Lin, Z., Carroll, G.R. & Carley, K.M. 2007. Simulation modeling in organizational and  
management research.  

*Journal of Consumer Research*: 14: 508-521,

modeling as a tool to explore innovation diffusion.  

Carroll, G. R., & Harrison, J. R. 1998. Organizational demography and culture: Insights from a formal  
model and simulation.  
Week 4
Quasi-Experimental Designs


(Optional -- Other Types, Examples of Quasi-Experimental Designs)


Week 5
Experimental Designs

S&S: Chap 6 | Chap 7: 194-206
MMK: Ch3: 80-98

Overviews and Controversies


Between-Subject and Within-Subject (Judgment Task) Designs


(Optional – Other Examples of Lab Experiments)


Week 6
Survey Designs

S&S Chap 8


(Optional -- Back to Real-World Constraints)


Week 7
Archival Research Designs I:
Types of Data and Methods of Analysis

S&S: Chap 11

Types of Data and Methods of Analysis

Cross Sectional Data


Event Count Analysis


Week 8:  
Archival Research II:  
Issues and Opportunities in Data Collection and Analysis; Using Multiple Methods  

S&S: Chap 12 p381-401  

Identifying Data Sources  
Compustat  
Execucomp  
CRSP  
SDC (New Ventures, VentureXpert, M&A)  
EDGAR  
Lexis-Nexis  
Internet Archive Project  
PSED Survey  

Narrative Data and Content Analysis  


Selection Bias in Archival Research  


Optional  

Week 9
Time and Methods

The Role of Time in Research Design


Problems and Issues associated with Time

Censoring


Examples


(Optional)


Week 10

Modes of Treating Constructs; Observation Types; Sources of Data

S&S: Chap 14 pp. 445-467
MMK: Ch3 pp. 80-102


Week 11

Choosing, Developing and Evaluating Measures I: Types of Measures and Construct Validity

S&S: Chap 9


Optional

S&S Chap 4: 90-107

Week 12
Choosing, Developing, and Evaluating Measures II: Technical and Quantitative Issues

P & S: Chap 5: 88-104, 109-117


Optional
P & S Chap 4


Week 13
Observations and Data Analyses

S&S: Chap 5
P & S: Chap 15: pp. 322-329


Optional


**Week 14**

Data Analyses; Inferences; General Linear Model Assumptions, Basics and Problems

S&S: Chap 15
P & S: Ch17-18

**Week 15**

(Un)Ethical Methods

S&S: Chap 16


# PAPER EVALUATION

<table>
<thead>
<tr>
<th>Component</th>
<th>Score</th>
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<tbody>
<tr>
<td><strong>FORMAT</strong></td>
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<tr>
<td>References</td>
<td>0.5</td>
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<tr>
<td>Rest of Paper (headings; organization, sequence, citations, etc)</td>
<td>1.5</td>
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<tr>
<td><strong>COMMUNICATION</strong> (brevity, clarity of expression; transition, flow; jargon-free)</td>
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<tr>
<td><strong>INTRODUCTION SECTION</strong></td>
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<tr>
<td>Statement/Framing of Problem (importance; relevance)</td>
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<tr>
<td>Choices of Theories or Hypotheses (definitions; clarity of statement; rationale; presentation; consistency)</td>
<td>3.0</td>
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<tr>
<td><strong>METHODS CRITIQUE SECTION</strong></td>
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<tr>
<td>Research Strategy (relative uses of Big 8; rationale; + &amp; - 's)</td>
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<tr>
<td>Threats to Internal, External Validity</td>
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<td>Modes of Operation (design; rationale; match to hypothesis)</td>
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<tr>
<td>Method(s) of Measurement (self-report, archive, etc.; reliability &amp; construct validity; rationale for choices; use of manipulation checks)</td>
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<td>Consideration of Time Issues</td>
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<tr>
<td>Consideration of Ethics (benefit/harm; informed consent; deception; debriefing; etc)</td>
<td>1.5</td>
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<tr>
<td>Statistical Analyses (set-up; match to data; appropriateness for hypothesis; null hypothesis; choice &amp; rationale)</td>
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<tr>
<td><strong>DISCUSSION/CONCLUSIONS SECTION</strong></td>
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<td>Most Important Limitations on Current Conclusions</td>
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<td>Suggestions for Future Research (in light of critique)</td>
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<td><strong>GRAND TOTAL</strong></td>
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(OTHER WRITTEN COMMENTS WILL BE ON YOUR PAPER)
ACADEMIC INTEGRITY

According to the Penn State Principles and University Code of Conduct:

Academic integrity is a basic guiding principle for all academic activity at Penn State University, allowing the pursuit of scholarly activity in an open, honest, and responsible manner. In accordance with the University’s Code of Conduct, you must not engage in or tolerate academic dishonesty. This includes, but is not limited to cheating, plagiarism, fabrication of information or citations, facilitating acts of academic dishonesty by others, unauthorized possession of examinations, submitting work of another person, or work previously used without informing the instructor, or tampering with the academic work of other students.

Any violation of academic integrity will be investigated, and where warranted, punitive action will be taken. For every incident when a penalty of any kind is assessed, a report must be filed, using the pdf form at this URL: www.smeal.psu.edu/smeal/integrity. This form is used for both undergraduate and graduate courses. This report must be signed by both the instructor and the student, and then submitted to the Associate Dean for Undergraduate Programs (s16@psu.edu).

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AMERICANS WITH DISABILITIES ACT

The Smeal College of Business Administration welcomes persons with disabilities to all of its classes, programs, and events. If you need accommodations, or have questions about access to buildings where Smeal College activities are held, please contact us in advance of your participation or visit. If you need assistance during a class, program, or event, please contact the member of our staff or faculty in charge. Access to courses should be arranged by contacting the Management & Organization Office: (814) 865-1789.

AN INVITATION TO STUDENTS WITH LEARNING DISABILITIES

It is Penn State’s policy to not discriminate against qualified students with documented disabilities in its educational programs. If you have a disability-related need for modifications in your testing or learning situation, your instructor should be notified during the first week of classes so that your needs can be accommodated. You will be asked to present documentation from the Office of Disability Services (located in 116 Boucke Building, 863-1807) that describes the nature of your disability and the recommended remedy. You may refer to the Nondiscrimination Policy in the Student Guide to University Policies and Rules.