Course Objectives
This course introduces doctoral students to the various research methods used in business disciplines including accounting, information systems, marketing, and management. The main objective is to enable students to design sound empirical studies and to produce publishable research papers. Throughout the course we will consider the following issues:

- Understand the diversity and commonality of research questions and methods in the business disciplines
- Identify the basic assumptions and principles underlying each method and the validity tradeoffs
- Choose the appropriate research method to answer a research question
- Recognize the advantages and disadvantages of each method compared to others and apply remedies to mitigate any validity concerns
- Develop a well-thought-out research proposal including expected contributions and anticipated limitations
- Review and criticize published research
- Appreciate the ethical issues related to conducting research in academic and business settings.

Topics Covered
Conceptualization of research questions and hypothesis development, causal inference and threats to inferring causation, measurement (reliability and validity), design (experiments, quasi-experiments and surveys), as well as sampling and questionnaire development.

Class Format
Each week will have a topical theme. In general, we will discuss readings related to the theme along with application exercises and assignments. Although we will introduce each topic and guide class discussions, we will endeavor to conduct this as a seminar, not a lecture. Readings from each of the disciplines will be offered so that students will be able to relate the course topics to issues and problems in their own specialization.

Delivery Mode
The delivery mode is in person, there will be one Zoom session to discuss the research project. The Zoom link and password will be posted on Blackboard.

Expectations
During most of the semester, you will be able to develop your critical thinking skills and apply your knowledge of these topics by analyzing a journal paper, writing a review of a conference paper, comparing your review to others, and learning how to respond to referee reports. In general, what you will accomplish in this course will depend heavily on your reading of the assigned material (prior to class) and your active participation in the class discussions where we will integrate the readings. By the end of the course, students who have participated actively will have acquired the knowledge and skills to be educated consumers of business research and will have begun developing into competent research scientists.
Required Readings
There are three complementary textbooks that provide background information on each topic. In addition, there is a selection of journal articles to provide deeper coverage. See list of articles below each topic in the schedule. These articles will be available online at the course website at the beginning of the semester.

Textbooks

Grading Policy
The final grade in the seminar will be based upon the following weights:
- In-class presentations and participation: 10%
- Exercises/Assignments: 30%
- Written Examination: 30%
- Research Proposal Paper: 30%

Class Attendance and Participation: Students should become active participants in class discussions. Students should show that they are mentally engaged with the discussion.

Exercises/Assignments: There will be a set of in-class exercises and homework to allow students to apply what they have learned. Students will select a recent paper on the top journal in their field to understand the structure of an academic paper. This companion paper will be analyzed to illustrate issues of internal and external validity. In addition, students will be required to take Baruch's IRB online training course and obtain the “CITI certification” to conduct research with human subjects. Students will receive credit for the successful completion of the Collaborative IRB Training Initiative. Students will also be required to write a review of a conference paper to develop their skills as peer reviewers. Finally, students will learn to set up an online survey in Qualtrics.

Examination: There will be a written exam consisting of 3 or 4 open-ended questions with sub-questions. The exam will probe your understanding of the methods and research issues covered in the class. Most questions will be essay questions and may be presented in the form of “research problems” for which you are asked to provide the best solutions applying the content learned in this course.

Term paper: At the end of the semester, each student should present an original research proposal on any topic of his or her choice, preferably combining the impact of Information Technology in his or her own discipline. This proposal will consist of two parts: (1) a structured review of the relevant literature from where the research question originated along with a set of hypotheses and (2) a specific research method to collect data and test the hypotheses. In addition to a thorough description of experimental procedures, proposals should include an analysis of the potential limitations of the study, and potential threats to validity. After receiving feedback, final proposal papers must be submitted during the final exam week. Late proposals will not be accepted.
Course Outline
The content of the course is organized in five modules: (1) Introduction and Production of Research Papers; (2) Validity Issues and Causal Inferences; (3) Experimental Design; (4) Measurement and Survey Research and (5) Development of a Research Proposal.

Weekly Schedule

<table>
<thead>
<tr>
<th>Week 1 (8/28): Research Foundations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assignment #1:</strong> Select a companion paper from a top tier journal in your discipline (Due Week 2)</td>
</tr>
<tr>
<td><strong>Assignment #2:</strong> Register and take online course to complete citi certification (Due Week 5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 2 (9/11): From Conceptualization to Design</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Week 3 (9/18): Internal vs. External Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shadish, Cook &amp; Campbell (2002). Ch. 2 (Internal Validity sections) &amp; Ch. 3 (External Validity sections).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 4 (10/2): Experimental Designs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shadish, Cook and Campbell (2002) Chptrs. 8, 9 and 10. Randomized Experiments and Practical Problems</td>
</tr>
</tbody>
</table>


**Assignment #3:** Review a conference paper assigned by your professor (Due Week 6)

**Week 5 (10/10 - Tuesday): Quasi-experiments and Other Experimental Designs**

Shadish, Cook and Campbell, Chptrs. 4 & 5 (Quasi- Experimental Designs)


**Week 6 (10/16): Reliability and Measurement**


**Week 7 (10/23): Construct validity**

Shadish, Cook & Campbell (2002). Ch. 3 (Construct Validity sections)


**Week 8 (10/30): Statistical Conclusion Validity**

Shadish, Cook & Campbell (2002). Ch. 2 (Statistical Conclusion Validity sections)


**Week 9 (11/6): Survey Research**


[*] Foster Thompson, L., & Surface, E.A. 2007. Employee surveys administered online: Attitudes toward the medium, nonresponse, and data representativeness. *Organizational Research Methods, 10*: 241-261.

>>**Assignment #4:** Design a pilot questionnaire in Qualtrics and collect data (Due Week 12)

**Week 10 (11/13): Sampling and Questionnaire Design**


>>**Assignment #5:** Evaluate the four types of validity your companion paper (Due Week 8)

**Week 11 (11/20): Written Examination**

In class test with open ended questions seeking integration of readings and knowledge in the answers. Details regarding format and timing will follow.

**Week 12 (11/27): Ethical Considerations** *(Guest Speaker: Prof. Raquel Fich)*

Shadish, Cook and Campbell, Chp. 9 (Ethical and Legal issues section pp. 280-290)


### Week 13 (12/4): Introduction to Mixed Methods (VIA ZOOM)


### Week 14 (12/11): Student presentations of research proposals

With Q&A and feedback from other students and recommendations for improvement

[*] Indicates optional readings

[**] Recommended Readings for Marketing Students