BUSM6001 – Research Methods for Business Studies (Compulsory)
School of Business, The University of Hong Kong

Course Description:
This course covers fundamental and contemporary research methodologies in business studies, including research design, survey method, econometric modeling and analysis, etc. The focus will be on how to develop appropriate research design for specific research questions, how to implement empirical analysis, and how to present and interpret the results. Moreover, students will present their own planned research projects, paying particular attention to (1) the contributions to existing knowledge and (2) justification for the methodology proposed.

Course Objectives:
- To understand the research processes, concepts, models, and paradigms that collectively form the foundation for business research.
- To gain the knowledge in identifying the major assumptions, strengths, and limitations of alternative research methods and obtain the hand-on knowledge on statistical techniques.
- To develop the skills of evaluating and applying alternative research methods for different research questions.
- To learn the skills of developing research papers for international journals.

Reference Books:

Behavioral/Survey Research

Mathematical Modeling
Data Mining/Text Mining/Social Network Analysis

Empirical Methods

Course Assessment

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<th>Component</th>
<th>Weight</th>
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<tr>
<td>Class Participation</td>
<td>20%</td>
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<tr>
<td>Literature Review</td>
<td>20%</td>
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<tr>
<td>Research Proposal</td>
<td>60%</td>
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1. **Class Participation (20%)**

Attendance is a necessary condition for class participation. It is also important to attend all the classes because the most insightful ideas come primarily from class discussion.

To encourage learning, students are expected to actively participate in class discussion. You should read carefully all required readings before each class. You should be ready to talk about the key message and methodological sophistication, of the papers under required readings.

This part of the grade includes your attendance of the class (including timeliness), your role as a critique, as well as your contribution to class discussion of the assigned readings.

2. **Literature Review (20%)**

In each session, papers in the reading list may be assigned to each individual student. Required readings are attached to this syllabus. You must come to each class after thoroughly reading all the required readings.

A two-page (typed, single spaced) *review of the assigned paper* will be required from each student. Please bring enough copies to the class to distribute to all the participants.
**Literature Review Guideline**

1) Author, Title, Publication and Pages  
2) Approach: Conceptual, Empirical, or Analytical  
3) Major Constructs, including their definition  
4) Hypothesized Relationships among the Major Constructs  
5) For Empirical Studies  
   i. Research Design: Exploratory Research, Descriptive Research, Causal Research  
   ii. Construct Measurement  
   iii. Reliability and Validity Tests  
   iv. Empirical Findings  
6) For Analytical Studies - Analytical Implications  
7) Major Strengths and Weaknesses  
8) Major Implications for Future Research

**3. Research Proposal (60%)**

Every student must submit a research proposal of an empirical study on one business topic by the end of the seminar. The research project will involve writing a major publishable paper focusing on business issues. You will need to read beyond the readings in the syllabus to write a research paper. It should be 10 – 15 pages plus references. It should be an empirical paper without data and results sections at this stage, but including analyses and results in the paper is highly encouraged.

The proposal should be developed with a targeted journal in mind. The proposal should consist of the following parts:  
1) Research questions and potential contributions of your study  
2) Literature review: a brief review of existing literature related to the research question  
3) Theoretical grounds and hypotheses: a brief description of the theoretical grounds and a clear statement of the hypotheses  
4) Sampling and data collection  
5) Measure of key variables  
6) Proposed analysis: discuss how you are going to analyze the data (not just what analytical technique you would use; at this stage, no actual data collection or analysis is expected)

**Notes**  
- Each student will submit the research paper by the last day of the class, on which you will present your research (about 15-minute presentation plus 5-10 minute Q&A)  
- Ideally, you should work on the empirical side of the paper during the rest of the year and send the full paper to major conferences in your field and then submit it to academic journals.
## Course Schedule

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<th>Session</th>
<th>Topic</th>
<th>Instructors</th>
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<td>1</td>
<td>Introduction: research process</td>
<td>Kevin Zhou</td>
<td>Sep 1</td>
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<tr>
<td>2</td>
<td>Sampling and data collection</td>
<td>Kevin Zhou</td>
<td>Sep 8</td>
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<tr>
<td>3</td>
<td>Measures: validity and factor analysis</td>
<td>Kevin Zhou</td>
<td>Sep 15</td>
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<td>4</td>
<td>Data Analysis: Mediator/Moderator</td>
<td>Kevin Zhou</td>
<td>Sep 22</td>
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<td>5</td>
<td>Mathematical modeling I</td>
<td>Hsiao-Hui Lee</td>
<td>Sep 29</td>
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<td>6</td>
<td>Mathematical modeling II</td>
<td>Hsiao-Hui Lee</td>
<td>Oct 6</td>
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<td>7</td>
<td>Web data collection</td>
<td>Michael Chau</td>
<td>Oct 13</td>
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<td>8</td>
<td>Text mining and social network analysis</td>
<td>Michael Chau</td>
<td>Oct 20</td>
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<td>9</td>
<td>Empirical methods I</td>
<td>Xin Wang</td>
<td>Oct 27</td>
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<td>10</td>
<td>Empirical methods II</td>
<td>Xin Wang</td>
<td>Nov 3</td>
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<td>11</td>
<td>Experimental design I</td>
<td>Echo Wan</td>
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<tr>
<td>12</td>
<td>Experimental design II</td>
<td>Echo Wan</td>
<td>Nov 17</td>
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<tr>
<td></td>
<td>Research Proposal Presentation</td>
<td></td>
<td><strong>Proposal due</strong></td>
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The information contained in this syllabus is subject to change and any changes made to this syllabus will be announced in class.
Sessions and Reading Lists

How to Write Academic Papers


1. Introduction: research process -- Kevin Zhou

   Recent Development


   Classic Reading


2. Sampling and data collection -- Kevin Zhou

   Recent Development


   Classic Reading

3. **Measures: validity and factor analysis -- Kevin Zhou**

**Recent Development**


**Classic Reading**


Fornell C and Larcker DF 1981 Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18(1) 39-50


Churchill GA 1979. A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research* 16(1), 64-73


4. **Data Analysis: Mediator/Moderator -- Kevin Zhou**

**Recent Development**

David A. Kenny’s personal web site: [http://davidakenny.net/](http://davidakenny.net/)


**Classic Reading**


5. Mathematical modeling I: Game Theory – Hsiao-Hui Lee

In this segment we will learn the use of game theory models in decision making. The topics covered include: Static and dynamic games with information.

**Main Reading:**


6. Mathematical modeling II: Contract Theory – Hsiao-Hui Lee

In this segment we will learn how to apply game theoretical model on contract theory. We will mostly focus on adverse selection and moral hazard model. Chapters 2, 3, and 4.

**Main Reading:**


7. Web data collection -- Michael Chau

- To discuss the use of data publicly available on the web in research
- To study how to collect web-based research data, such as website data, social media data (e.g., blogs, Twitter, Facebook), auction data (e.g., eBay), and review data (e.g., Amazon, TripAdvisor).

**Recent Development**


**Classic Reading**


8. **Text mining and social network analysis -- Michael Chau**

- To provide an introduction to data mining and text mining
- To discuss how to use data mining in business research
- To study how to convert unstructured data (such as text or networks) into usable variables

**Main Reading:**


9. **Empirical methods I -- Xin Wang**

**Empirical Event Studies**

i. Empirical measures of abnormal performance;

ii. Size and power of event study tests;

iii. Long-horizon event studies;

iv. Pre- vs. Post-event change analysis;

v. Endogeneity issues for event studies;

**Recent Development**


**Classic Reading**


10. Empirical methods II -- Xin Wang

Research Design with Linear Regressions
i. Omitted correlated variables problem;
ii. Cross-sectional and time-series dependence;
iii. Research designs based on interaction item;
iv. Market efficiency tests based on linear model;
v. Endogeneity issues.

Recent Development

Classic Reading
11. Experiment Design I: Research Design and Validity

**Recent Development**


**Classic Reading**


12. Experiment Design II: Operationalization, Manipulation, Measure

**Recent Development**


**Classic Reading**


