University of British Columbia
Sauder School of Business

COMM 311 – 3 credits
Commerce Scholars Program Research Methods
Sep. 4 - Nov. 30, 2018 – Thursdays 3:00pm – 6:00pm
Class Web Site: http://marcdavidseidel.com/scholars

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<th>OFFICE</th>
<th>TELEPHONE</th>
<th>EMAIL</th>
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<tr>
<td>Marc-David Seidel</td>
<td>HA 678</td>
<td>(604) 827-5155</td>
<td><a href="mailto:seidel@mail.ubc.ca">seidel@mail.ubc.ca</a></td>
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INTRODUCTION

Using Ph.D. style pedagogy, I will introduce you to various research methods utilized by a wide variety of business researchers to help prepare you for your research mentorship and future research projects. The course will provide a broad overview of the research process including picking a research question, designing a study, choosing appropriate methodology, designing a data collection effort, coding and analyzing data, communicating results, and the peer review process. The course will not make you an expert in any particular method or research design. But it should prepare you to identify which designs and methods would be most appropriate to delve more deeply into to answer your own future research questions. You also will build a competency in helping to review other people’s research.

Since we are following a seminar format, you should expect to come to class and be pushed to think actively by both the instructor and your classmates. You should equally push your classmates and instructor to think actively about the topics at hand. Information will not be packaged into lectures for you to go home and memorize. Assigned readings are provided to give grounding for each day’s discussion. Failure to prepare the readings adequately prior to class will jeopardize your ability (and those of your classmates) to learn in this course. If you put in the appropriately high level of effort I assure you this will be a course you will not forget.

ASSIGNMENTS: READINGS AND REVIEW

Since the readings will form the basis of our daily discussions, it is crucial that you read the material BEFORE class sessions so that you can contribute thoughtfully to the class discussions. A detailed, day-by-day schedule of readings, assignments, and preparation questions is found below. It is essential that you prepare prior to class meetings in the manner indicated by the syllabus. It is your responsibility to note these assignments ahead of time.

Many class sessions also have an assignment that will be due at the start of class. These are detailed in the syllabus below. For the majority of the assignments you will be expected to discuss your assignment verbally during the seminar.

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Required Readings

OT: Open textbooks. The open textbook movement offers comprehensive textbooks which are free to distribute. We will draw upon several of these, which you can use free of charge.

SAA: Supplemental assigned articles. One of the benefits of attending a research university is that the majority of research articles and various database tools are available to you free of charge via the UBC library contracts. I will provide links via the course webpage to the articles and tools. Keep in mind you must access some of the links from an on-campus computer, or utilize the library proxy or UBC VPN to access the articles from off-campus.

GRADING

Research Proposal (50 percent of course mark)

You will complete multiple research activities to aid you in developing a final research proposal. Details of each component are listed in the syllabus on the day each component is due. You are strongly encouraged to draw on the theoretical concepts from the course in developing the various components when appropriate.

For each class session when a component is due you will present that component to other members of the class. Feel free to utilize any visual aids or handouts that you feel will assist in your presentation.

While you will receive comments on the various research activities that are due earlier in the semester, they will not be graded directly. So I encourage you to take risks and really try to push the field forward.

Using the feedback on these activities from both your classmates and instructor, you will produce your final research proposal for Day 11. That final proposal will be graded as follows:

- Development of research question – 5 percent of course mark
- Development of literature review – 5 percent of course mark
- Development of hypotheses – 5 percent of course mark
- Specificity and practicality of data collection – 10 percent of course mark
- Specificity and appropriateness of methodology – 10 percent of course mark
- Explanation of how you can interpret your results – 5 percent of course mark
- Discussion of further research to follow-up assuming your hypotheses are confirmed – 5 percent of course mark
- Verbal presentation of the proposal – 5 percent of course mark

Research Proposal Evaluation (20 percent of course mark)

You will complete an evaluation of one of your classmate’s completed research proposals (the Day 11 assignment). You will present your evaluation in both written and verbal format on Day 12. Your grade will be computed as follows:

- Analysis of strengths and weaknesses of the proposal – 5 percent of course mark
- Use of theoretical course concepts in making the evaluation – 5 percent of course mark
- Developmental suggestions for the proposal – 5 percent of course mark
Verbal presentation of the evaluation – 5 percent of course mark

Active Learning (30 percent of course mark)

Because this course relies heavily on applications and discussions of the theoretical materials, 30 percent of your grade will be determined from active learning activities. Active learning means that you take responsibility both for your learning, and helping others to learn more about the material. The four primary components of active learning in this course are:

1) Being prepared by completing all assignments and readings effectively prior to coming to the class in which they are due.
2) Integrating concepts from the readings into our discussions.
3) Building upon what your classmates and instructor have said.
4) Critical thought demonstrated through deep analysis of the various assignments and readings.

A critical component of the course is spirited, informed discussion. Toward this end, you have two responsibilities, one private and one public. On the private dimension, you should familiarize yourself with the assigned material, taking care to prepare thoroughly, and to develop informed individual responses to the material. Try to figure out the connection prior to class between the readings and the rest of what has already been covered earlier in the course.

Readings will normally not be fully reviewed separately – you are assumed to have read and understood them. This private preparation enables you to successfully contribute to the class. On the public dimension, these ideas must be brought forward as a basis for rich classroom discussion. The class can then explore these ideas further in active analysis. Please keep in mind that the only measurable output of your preparation is the public dimension. Excellent participation incorporates the lessons from the theories into the discussion.

Excellent participation also builds on what your classmates have said to move the conversation forward – not repeating what has already been said. Comments based solely on “gut reaction” generally do not add much value. Participation that does not add any value is treated the same as not participating. Frequent non-quality contributions may be penalized. Quality of contribution is rewarded – not quantity.

Since this is a discussion-based course, I consider attendance in every class to be very important. If you do miss a class, it is your responsibility to find out from your classmates what material was covered, what additional assignments were made, and what handouts you may have missed.

You are expected to be prepared for every class meeting. Since I frequently call on students whose hands are not raised, please let me know before the start of class if you are not prepared so that I can avoid embarrassing you inadvertently. Note, however, that this should only occur for exceptional reasons – particularly in a class of this size and format where everyone must move the discussion forward together.

Policy Regarding Re-reads of All Graded Coursework

In the event that you feel something was missed in the grading of your work (be it mathematical error or other), please write a brief summary of what you feel needs further attention and submit this re-read request with your marked work. If you request a re-read, it will be read from scratch.
and your grade may go up or down. Each grade component is considered final one week after
given to the class and will no longer be open for re-reading or discussion. I do not accept
personal lobbying efforts on behalf of grades other than in writing. I am happy to discuss your
work with you for educational purposes, but keep in mind that once we discuss the work the
grade is considered final if you have not already had the work re-read.

**COURSE SCHEDULE**

Day 1 - Sep. 6 The nature of social science

**Assignment:**
- Bring an article from a recent (within the past week) news source (newspaper, Google
  news, etc.) that reports the findings of a scientific study related to a business topic that
  interests you.
- Using the Journal Citation Reports from ISI Knowledge (link on course webpage) find the
  impact factors of the *Journal of Finance, Administrative Science Quarterly*, and *Science*.
- E-mail Marc-David from the e-mail address you would like to signup for the class
  Workspace, and after receiving the return invitation confirm Workspace is working on
  your machine.
- Schedule your faculty mentor interview for the Day 4 assignment (it may take time to get
  on your mentor's schedule).

**Required Background Reading:**
- OT: Anol Bhattacherjee. *Social Science Research: Principles, Methods, and Practices*
  Chapters 1 and 2

**Questions to think about prior to class:**

1) What is the difference between a research university and a community college?
2) Why am I interested in getting involved in doing research?
3) What types of research questions do I hope to one day answer?
4) What is something you noticed in the past month that made you go, “Hmmm...”?
5) How can I quickly communicate the primary findings of my article to other members of
   the class?
6) Why did you find it interesting?
7) What hypotheses are tested?
8) Does the study use quantitative or qualitative data?
9) What is the unit of analysis in the study?
10) What was the impact factor of *Journal of Finance, Administrative Science Quarterly*, and
    *Science*?

Day 2 - Sep. 13 Measurement, models, sampling, and observational data

**Assignment:**
- If you own a laptop, please bring it to class. If not, please arrange to share a laptop with
  a classmate. Please download the Stata installation files from the class Workspace prior
  to class – they are large and can take a while to download so please consider doing so
  in a location with good internet speed (campus or elsewhere). We will be helping you get
  up and running on Stata, with an introductory session.
- Think of at least three particular behaviours or characteristics that you can observe by
sitting and watching people in a café or library without interacting with them. Collect data by observing at least 10 men and 10 women from a distance and recording your observations in an Excel data file. Code each behaviour or characteristic as a binary variable (0/1), and include a binary variable for the person’s sex. If your behaviour or characteristic is nominal, then code it as a series of dummy variables (0/1 for each nominal value as a separate variable).

- Upload your excel spreadsheet to the class Workspace in the Day 2 folder.

Required Background Reading:
- OT: Anol Bhattacherjee. Social Science Research: Principles, Methods, and Practices, Chapters 5 and 6
- SAA: “Body Ritual Among the Nacirema”

Questions to think about prior to class:

1) How was the culture I collected data on similar to the Nacirema?
2) How can I quickly communicate the details of my data collection to other members of the class?
3) What patterns does my data collection show me?
4) What are some biases that can be introduced by sampling?

Day 3 - Sep. 20 Theory development

Assignment:
- Using the Journal Citation Reports from ISI Web of Knowledge identify a journal rated in the Top 10 of impact factors in a business or related discipline of your choosing. Report the journal title, the Journal Citation Reports subject category (Business, Economics, Management, Psychology, Sociology, etc.), and the journal's impact factor.
- Search through recent issues of the journal you have identified to find a research article of interest to you, but which has a conclusion you disagree with or think can be improved with further research (Hint: Frequently the discussion section of an article discusses areas of future research related to the focal article). Provide the full citation of the article, and a 1 paragraph summary of the conclusion. Do not worry if you do not fully understand any math or statistical analyses in the article. Focus primarily on the theory development and conclusions drawn by the author(s).

Required Background Reading:
- OT: A Vision of Responsible Research in Business and Management: Striving for Useful and Credible Knowledge
- OT: Anol Bhattacherjee. Social Science Research: Principles, Methods, and Practices, Chapters 3 and 4

Questions to think about prior to class:

1) How can I quickly communicate the primary findings of my article to other members of the class?
2) Why do I find the article interesting?
3) What aspect of the conclusion do I disagree with or think can be improved?
4) What is the purpose of business school research?
5) How should society generate new knowledge 25 years from now?
Day 4 – Sep. 27 Basic parameters of research design

Assignment:
- Interview your faculty mentor and be sure to cover answers to the following questions:
  o What are some key current debates in the research literature you primarily identify with?
  o What research areas are you currently working on?
  o Which journals are the best ones to read in your broad research area?
  o How do you envision society being better as a result of your research?
- Identify a recent empirical article authored or co-authored by your faculty mentor. Be sure to select an article that you can answer the necessary questions about. Do not worry if you do not fully understand any math or statistical analyses in the article. You will present the article to other members of the class for 5 minutes max. Be sure to quickly cover the following:
  o The article title, authors, journal title, the Journal Citation Reports subject category and the journal’s impact factor
  o What is the research problem? This can take the form of, “Why is it that...”
  o Discuss how the author(s) think the dependent variable varies or changes – in other words describe the phenomenon under investigation.
  o Identify and define the dependent variable(s)
  o Identify and define the unit of analysis
  o Discuss the target population and sampling
  o Discuss the level of measurement used
  o Give a general argument and rationale for what the author(s) think is going on
  o State at least one alternative explanation a skeptic may have to the author(s)’ theoretical explanation and findings
  o Describe the potential societal implications of the research findings

Required Background Reading:
- OT: Anol Bhattacherjee. Social Science Research: Principles, Methods, and Practices, Chapters 7 and 8

Question to think about prior to class:

1) How can I present my interview and article most effectively to other members of the class? (Be prepared to present your assignment for about 5 minutes.)

Day 5 – Oct. 4 Citation management and archival data sources

Assignment:
- Bring laptops (it is ok to share with a classmate) for a session on citation management and archival data sources.

Required Background Reading:
- OT: Principles of Sociological Inquiry: Qualitative and Quantitative Methods, Chapters 3, 4, and 5
Day 6 - Oct. 11 Research question generation

Assignment:
- Brainstorm 10 potential research questions you are interested in based upon your discussions with your mentor, related research literature you have read, problems you see in society, and phenomenon you have read about or experienced
- For each question have a single sentence phrased as a question with the big picture research question
- Be prepared to read your list of 10 questions out loud and to discuss them with the class

Day 7 - Oct. 18 Experiments and Quasi-experiments

Assignment:
- You have been invited to pitch a foundation to fund the testing of a theory – congratulations! The foundation that is funding the research expects you to test an aspect of your theory experimentally. Your presentation (maximum of 5 minutes) should contain the following elements:
  o Describe your research question.
  o Describe your experimental design using the proper scientific terms.
  o Define the unit of analysis and your variables (both dependent and independent).
  o Discuss the internal and external validity issues raised by your design.
  o Describe how you will conduct your experiment including the subjects, experimental manipulation, measurement of the variables, and debriefing.
  o How will you determine if your hypotheses are supported?
  o What are the weaknesses and drawbacks of your design?
  o What are the potential societal implications of this research?

Required Background Reading:

Questions to think about prior to class:

  1) How can I communicate the details of my proposed experiment to other members of the class? (Be prepared to present your pitch for 5 minutes maximum.)

Day 8 - Oct. 25 Survey design

Assignment:
- A research officer at Statistics Canada learned of your research recently and has become quite interested in creating a large-scale survey on a theory of your choosing. This is a wonderful opportunity for you. Statistics Canada would like to see a rough design for the survey. Your write-up (maximum of 5 double-spaced pages) should contain the following elements:
  o Describe your research question.
  o Identification of the target population and unit of analysis.
  o Description of the sampling design. Justify your choice and discuss both the strengths and weaknesses of the design.
  o What types of sampling errors might be introduced by the design?
  o What survey method should be utilized? Why?
What types of questions will be asked?
How will you know if your theory is supported?
What will skeptics say about your survey design?
What are the potential societal implications of your research if your theory is supported?

Required Reading:
- OT: Principles of Sociological Inquiry: Qualitative and Quantitative Methods, Chapters 7 and 8

Questions to think about prior to class:

1) How can I communicate the details of my survey to other members of the class? (Be prepared to present your assignment for about 5 minutes.)

Day 9 - Nov. 1 Archival data design

Assignment:
- You are still awaiting news from Statistics Canada about your large-scale survey. Meanwhile, a research officer at a private foundation learned of your research and has become quite interested in helping out. The foundation has requested a proposal presentation for a study using available data. Identify an archival dataset that contains a minimum of 1000 records that you find interesting and put the dataset into your Workspace folder prior to class as a Stata file ready to be analyzed on your laptop (feel free to share laptops with a classmate).
- Your presentation (5 minute pitch) should contain the following elements:
  - Describe your research question.
  - Develop and describe your hypotheses using proper literature citations.
  - Describe and justify your choice of research methods.
  - Be as specific as you can about which variables from your dataset you will be using.
  - Discuss the sampling issues and potential problems that your chosen method has.
  - Discuss how you will evaluate the data quality.
  - How will you know if your hypotheses are supported?
  - What concerns would a skeptic have about your design?
  - What are the potential societal implications of your research if your theory is supported?

Required Background Reading:
- OT: Anol Bhattacherjee. Social Science Research: Principles, Methods, and Practices, Chapters 14 and 15

Questions to think about prior to class:

1) How can I quickly communicate the details of my study to other members of the class? (Be prepared to present your assignment for 5 minutes max.)
2) What types of additional methods could I supplement my study with to address concerns a skeptic may have about the design?
Day 10 - Nov. 8 Using available data – hands on

Assignment:
- Using your archival dataset from last week, prepare at least 5 models based upon your presentation last week
- Be prepared to present for 5 minutes with the following content:
  - Challenges you experienced in analyzing your data
  - How you overcame them
  - Problems still pending with your models you would like help on
  - New questions your analysis has raised going forward
- Bring your laptop loaded with Stata and your dataset to conduct follow-up analyses on your dataset (feel free to share laptops with a classmate).

Day 11 – Nov. 15 Research proposals

Assignment:
- Congratulations! Your work so far has led to a series of interesting research ideas. Pick from among those that you have already completed (or choose a new one). If your previous assignments are related, feel free to tie them together and use them. If not, that is also ok. Produce a research proposal as a Word document (maximum of 20 double-spaced pages) that includes:
  - A research question
  - A literature review (with proper citations)
  - At least 3 hypotheses
  - Explanation of how you would collect data (be very specific here)
  - Explanation of what methodology you would use to analyze your data (be very specific here including models to be tested, etc.)
  - Explanation of how you would tell if your hypotheses were correct from your data analysis
  - Discussion of further research that would be useful to follow-up to your current proposed study
  - Discussion of the potential societal implications of your research
- Send your research proposal to Marc-David via Workspace prior to class. It will be assigned for review to one of your classmates for next week.

Required Background Reading:
- OT: Anol Bhattacherjee. Social Science Research: Principles, Methods, and Practices, Chapter 16

Questions to think about prior to class:

1) How can I communicate the details of my overall research proposal to the class? (Be prepared to formally present your proposal for 7 minutes max.)

Day 12 - Nov. 22 Reviewing

Assignment:
- SSHRC has asked you to review a research proposal because they are considering
funding it. They want you to prepare a review (maximum of 5 double-spaced pages) of the proposed research of your assigned classmate. A copy of your review will be provided to the author of the research proposal you are evaluating. SSHRC is particularly interested in having the following included:
  o Is the research problem well defined?
  o Is the research problem justified theoretically?
  o Is the research problem important?
  o What are the societal implications of the research problem?
  o Are the hypotheses testable?
  o Is the design appropriate for the hypotheses they propose to test? Why or why not? Review each and suggest modifications.
  o How practical is the design? Will this research be possible to complete? Would you recommend cutting any particular portions? Why or why not?
  o Should the project be funded with public funds? Why or why not?
• E-mail a copy of your review to both Marc-David and the person who you are reviewing prior to the start of class.

Questions to think about prior to class:

1) How can I communicate the details of my evaluation of the research proposal to the class? (You will make a formal presentation of 7 minutes max in class. Feel free to use visual aids or handouts as appropriate.)

Day 13 - Nov. 29 Wrap-up, and Next Steps
Questions to think about prior to class:

1) Using the feedback on my proposal received last week, what would I need to do going forward to turn this into a full research project?
2) What am I interested in pursuing for my Commerce Scholars Research?
3) How can I increase the potential for societal impact through my research?
4) What theories and skills do I most hope to learn from working with my mentor?