

B784
Introduction to Quantitative Methods
Fall 2026 Course Outline

Human Resources and Management Area
DeGroote School of Business
McMaster University

COURSE OBJECTIVE

This seminar course provides students with an introduction to some methods commonly used in management research that fall under the umbrella of quantitative research. The objectives are for students to become familiar with (1) questions these methods can help answer, and (2) how to use these methods.

This seminar also provides exposure to research design and methods in business, psychology, and the behavioral sciences more generally, with an emphasis on developing skills fundamental to designing and critically evaluating research projects, with an emphasis on a positivist and empirical paradigm.

INSTRUCTOR AND CONTACT INFORMATION

Professor	Baniyelme Zoogah
Emails	Zoogahb@mcmaster.ca
Office hours:	330-430pm By appointment
Classes:	Monday (7pm – 10pm)
Room	DSB 421

COURSE DESCRIPTION

This course seminar provides exposure to, and overview of, key issues, methods, and approaches to conducting research from a **positivist, empirical** perspective. In the twelve weeks, we will cover Philosophy of science to ground the course (Weeks 1 and 2) followed by Research Design (Week 3, Context (Week 4), Level of analysis (Week 5), Reliability (Week 6), Validity (Week 8), Method Bias (Week 9), Control variables and Dynamics (Week 10), Sampling (Week 11), Experiments and Policy Capturing (Week 12), and Ethics (Week 13).

Given that science evolves, we will concentrate on foundational topics with the understanding that you will need to continually learn new research methods for your dissertation and throughout your career.

In-class discussions contribute to the value you gain from this seminar, so it is essential that you come prepared, having read, and reflected on the assigned manuscripts.

Class is structured to have two (2) parts. In the first part, I will provide a brief overview of the topic and readings. In the second part, the students will discuss the readings in depth. This is also a good opportunity for you to ask questions. I ask you to share your work with your classmates because an important part of learning to be an academic is learning from your colleagues' work and learning how to help your colleagues in their work. Part of every class session will therefore be devoted to helping each other advance your respective research projects.

There will be three (3) assignments (**Part A**) that are cumulative (they build upon each other). Each assignment is specified in the schedule of readings. In addition, there will be a presentation (**Part B**). Before the mid-term recess, I will assign you the parameters for a new study that you will design that incorporates some elements of our discussion thus far. After the break, students will be asked to present their design, and they will receive feedback on the rigor of what they have proposed. The third part (**Part C**) involves a final exam. You will be given a question to answer and submit your response within a week after the last day of class.

LEARNING OUTCOMES

This course will:

1. Test students' understanding of methods presented in the readings.
2. Develop skills in communicating ideas, in developing and presenting arguments, in listening to and understanding others, and in challenging others' views in a way that advances everyone's understanding.
3. Learn to think independently and critically: you will need to be able to analyze the methodological strengths and deficiencies of the articles that are being discussed, and how

these methods issues influence the kinds of theoretical claims that can be made. These skills will be useful to you when you conduct your own research.

COURSE MATERIALS AND READINGS

Books:

- 1). Okasha, S. (2016). Philosophy of science: a very short introduction
Link to our catalog for the latest edition of the eBook you requested (2016)
https://mcmaster.primo.exlibrisgroup.com/permalink/01OCUL_MU/deno1h/alma991031749799707371

Here it is again, this seems to work for me

https://mcmaster.primo.exlibrisgroup.com/permalink/01OCUL_MU/deno1h/alma991032885918307371

Or you can connect directly to the resource here

<https://doi-org.libaccess.lib.mcmaster.ca/10.1093/actrade/9780198745587.001.0001>

- 2). Williams, M. (2021). Realism and Complexity in Social Science. Routledge.
<https://www-taylorfrancis-com.libaccess.lib.mcmaster.ca/books/mono/10.4324/9780429443701/realism-complexity-social-science-malcolm-williams>

- 3). Aguinis, H. (2025). Research Methodology: Best Practices for Rigorous, Credible, and Impactful Research.

- 4). S.G. Rogelberg (Ed.). (2004). Handbook of Research Methods in Industrial and Organizational Psychology. Blackwell Publishing Ltd.: Malden: MA.

Articles:

As noted in each class session. These are all available via the McMaster library system.

EVALUATION

Notes about the types of assessments used as well as notes regarding how group work will be evaluated.

Components and Weights

There are three graded components to this part of the course. Students' grades will be calculated as follows:	
Three Assignments	30%
Research Design presentation (In-class)	10%
Final Exam (Part 1 in class , Part 2 take-home)	Part 1 = 15%, Part 2 = 35%
Participation (attendance and contribution in class)	10%

Conversion

At the end of the course your overall percentage grade will be converted to your letter grade in accordance with the following conversion scheme.

Grade	Points	Equivalent Percentages
A+	12	90 – 100
A	11	85 – 89
A-	10	80 – 84
B+	9	77 – 79
B	8	73 – 76
B-	7	70 – 72
F	0	69 and under

Part A: Three Assignments 3 x 10% = 30%)

Over the course of the term, you will complete three assignments (Weeks 3, 8, and 11). These assignments are designed to help you practice using the methods and will help you work towards developing your final exam for the class. The goal of the three assignments is for you to become adept at producing research that is classic, interesting, matters, and replicable, and you know how to investigate them rigorously. I will provide you with feedback. Two of the assignments will be randomly assigned to your peers to be graded (in their role of Reviewer) independently, fairly, and developmentally.

All work must be completed independently. Each assignment is *1 page single-spaced* (plus any necessary appendices) and should be submitted to the instructor **when stated in the detailed outline below**, according to the order of the class schedule. Late assignments will not be accepted.

ASSIGNMENT 1: (Due Week 3). Assignment (due night before to me): Provide me with a one-page topic of a research study that you would like to conduct, that uses a quantitative method. You must include a title, research question, philosophical justification of the question, and potential contribution. Please note that one-page = one-page with normal margins and font size.

ASSIGNMENT 2: (Due week 7): Provide me with a one-page proposal of a research study that you would conduct. You build on Assignment 1 by outlining your design and method (sample, measures, analytic technique).

Please note that one-page = one-page with normal margins and font size.

ASSIGNMENT 3: (Due Week 11): Provide me with a one-page proposal of a research study that you would conduct. You build on Assignment 2 by discussing the expected findings, implications for theory and practice as well as contribution if your results were to hold empirically. Please note that one-page = one-page with normal margins and font size.

I encourage you to use the relevant short guides of **From the Editors (FTE)** of Academy of

Management Journal:

FROM THE EDITORS: PUBLISHING IN "AMJ"—PART 1: TOPIC CHOICE. Jason A. Colquitt and Gerard George. The Academy of Management Journal, June 2011, Vol. 54, No. 3 (June 2011), pp. 432-435

FROM THE EDITORS: PUBLISHING IN "AMJ"—PART 2: RESEARCH DESIGN. Joyce E. Bono and Gerry McNamara. The Academy of Management Journal, August 2011, Vol. 54, No. 4 (August 2011), pp. 657-660

FROM THE EDITORS PUBLISHING IN AMJ—PART 3: SETTING THE HOOK. Academy of Management Journal. 2011, Vol. 54, No. 5, 873–879.

FROM THE EDITORS: PUBLISHING IN AMJ—PART 4: GROUNDING HYPOTHESES. Raymond T. Sparrowe and Kyle J. Mayer. The Academy of Management Journal, December 2011, Vol. 54, No. 6 (December 2011), pp. 1098-1102

FROM THE EDITORS: PUBLISHING IN AMJ—PART 5: CRAFTING THE METHODS AND RESULTS. Yan (Anthea) Zhang and Jason D. Shaw. The Academy of Management Journal, February 2012, Vol. 55, No. 1 (February 2012), pp. 8-12

FROM THE EDITORS: PUBLISHING IN "AMJ"-PART 6: DISCUSSING THE IMPLICATIONS. Marta Geletkanycz and Bennett J. Tepper. The Academy of Management Journal, April 2012, Vol. 55, No. 2 (April 2012), pp. 256-260

Part B: Presentation (10%)

I will assign you the parameters for a new study In Week 5 that you will design that incorporates some elements of our discussion thus far. You will present your **study design** in **Week 6**, and you will receive feedback on the rigor of what you have proposed. Please plan on spending 15 minutes for the presentation to be followed by Q & A. Each student is expected to **present** AND **ask** a question.

PART C: Final Home Exam (50%)

The final exam has 2 components: In-class (Nov 23, 2026) and take home (December 5, 2026).

Part 1: You will be given 1 question to answer in class. You will be provided with a test book answer sheet for you to provide your answer. It is worth 15% of the final exam.

Part 2: This is a take-home exam, like a comps question. You will be given a research topic on Nov 23, 2026, and your task is to design a quantitative study to address the topic and submit on December 5, 2026. This will include creating a research question, describing appropriate methodology and data that will be gathered, as well as a detailed discussion about the rationale for each element of your research design (with citations as appropriate). The topic provided will give flexibility in potential research designs, so there are multiple directions that you could take. However, the exam will be graded based on the fit between the research question and the methodology chosen, coherence between the elements of the design you have chosen, and the strength of your rationale. The exam should be no more than 20 pages, double-spaced, in 12-point font. No extensions are available except under extraordinary circumstances.

PART D: Participation (10%)

This assesses attendance and contribution in class. The first and last week are excluded but every week

after that (except recess week) is worth 1% point for a total of 10%. So, if you are not in class for a particular class, know that you lose 1%. If there is a valid excuse, you get 0.5% of participation because your contribution will be missing in class.

COURSE MODIFICATION

From time to time there may be a need to remove/add topics or to change the schedule or the delivery format. If these are necessary, you will be given as much advance notice as possible.

GENERATIVE AI

USE PROHIBITED

Students are not permitted to use generative AI in this course. In alignment with [McMaster academic integrity policy](#), it “shall be an offence knowingly to ... submit academic work for assessment that was purchased or acquired from another source”. This includes work created by generative AI tools. Also state in the policy is the following, “Contract Cheating is the act of “outsourcing of student work to third parties” (Lancaster & Clarke, 2016, p. 639) with or without payment.” Using Generative AI tools is a form of contract cheating. Charges of academic dishonesty will be brought forward to the Office of Academic Integrity.

ACADEMIC INTEGRITY

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. **It is your responsibility to understand what constitutes academic dishonesty.**

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in grave consequences, e.g., the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university. For information on the various types of academic dishonesty please refer to the [Academic Integrity Policy](#).

The following illustrates only three forms of academic dishonesty:

- plagiarism, e.g., the submission of work that is not one’s own or for which other credit has been obtained.
- Improper collaboration in group work.
- Copying or using unauthorized aids in tests and examinations.

www.degroote.mcmaster.ca

AUTHENTICITY/PLAGIARISM DETECTION

Some courses may use a web-based service (Turnitin.com) to reveal authenticity and ownership of student submitted work. For courses using such software, students will be expected to submit their work electronically either directly to Turnitin.com or via an online learning platform (e.g., Avenue to Learn, etc.) using plagiarism detection (a service supported by Turnitin.com) so it can be checked for academic dishonesty.

Students who do not wish their work to be submitted through plagiarism detection software must inform the instructor before the assignment is due. No penalty will be assigned to a student who does not submit work to the plagiarism detection software. **All submitted work is subject to normal verification that standards of academic integrity have been upheld** (e.g., on-line search, other software, etc.). For more details about McMaster's use of Turnitin.com please go to www.mcmaster.ca/academicintegrity.

COURSES WITH AN ONLINE ELEMENT

Some courses may use online elements (e.g., email, Avenue to Learn, LearnLink, web pages, capa, Moodle, ThinkingCap, etc.). Students should be aware that, when they access the electronic components of a course using these elements, private information such as first and last names, usernames for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation of a course that uses on-line elements will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure, please discuss this with the course instructor.

CONDUCT EXPECTATIONS

As a McMaster student, you have the right to experience, and the responsibility to demonstrate, respectful and dignified interactions within all our living, learning, and working communities. These expectations are described in the [Code of Student Rights & Responsibilities](#) (the "Code"). All students share the responsibility of maintaining a positive environment for the academic and personal growth of all McMaster community members, **whether in-person or online**.

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect, disrupt, or interfere with reasonable participation in university activities. Student disruptions or behaviours that interfere with university functions on online platforms (e.g., use of Avenue 2 Learn, WebEx or Zoom for delivery), will be taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students' access to these platforms.

ACADEMIC ACCOMMODATION OF STUDENTS WITH DISABILITIES

Students with disabilities who require academic accommodation must contact [Student Accessibility Services \(SAS\)](#) at 905-525-9140 ext. 28652 or sas@mcmaster.ca to make arrangements with a Program Coordinator. For further information, consult McMaster University's [Academic Accommodation of Students with Disabilities](#) policy.

ACADEMIC ACCOMMODATION FOR RELIGIOUS, INDIGENOUS OR SPIRITUAL OBSERVANCES (RISO)

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the [RISO](#) policy. Students should normally submit their request to their Faculty Office **within ten working days** of the beginning of term in which they anticipate a need for accommodation or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

COPYRIGHT AND RECORDING

Students are advised that lectures, demonstrations, performances, and any other course material provided by an instructor include copyright protected works. The Copyright Act and copyright law protect every original literary, dramatic, musical, and artistic work, **including lectures** by university instructors.

The recording of lectures, tutorials, or other methods of instruction may occur during a course. Recording may be done by either the instructor for the purpose of authorized distribution, or by a student for the purpose of personal study. Students should be aware that their voice and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

EXTREME CIRCUMSTANCES

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, Avenue to Learn and/or McMaster email.

ACKNOWLEDGEMENT OF COURSE POLICIES

Your enrolment in this course will be an implicit acknowledgement of the course policies outlined above, or of any other that may be announced during lecture and/or on A2L. **It is your responsibility to read this course outline, to familiarize yourself with the course policies and to act accordingly.**

Lack of awareness of the course policies **cannot be invoked** at any point during this course for failure to meet them. It is your responsibility to ask for clarification on any policies that you do not understand.

RESEARCH USING HUMAN SUBJECTS

All researchers conducting research that involves human participants, their records or their biological material are required to receive approval from one of McMaster's Research Ethics Boards before (a) they can recruit participants and (b) collect or access their data. Failure to comply with relevant policies is a research misconduct matter. Contact these boards for further information about your requirements and the application process.

McMaster Research Ethics Board (General board): <https://reo.mcmaster.ca/>

Hamilton Integrated Research Ethics Board (Medical board): <http://www.hireb.ca/>

COURSE SCHEDULE

Philosophy of science to ground the seminar (Weeks 1 and 2) followed by Research Design (Week 3), Context (Week 4), Level of analysis (Week 5), Reliability (Week 6), Validity (Week 8), Method Bias (Week 9), Control variables and Dynamics (Week 10), Sampling (Week 11), Experiments and Policy Capturing (Week 12), and Ethics (Week 13).

<u>WEEK 1: 7/9/26</u> What is philosophy of science & social science?	1). We will focus on Chapters 1, 2, 3, 6 of Philosophy of Science. Okasha, S. (2016). Philosophy of science: a very short introduction https://mcmaster.primo.exlibrisgroup.com/permalink/01OCUL_MU/deno1h/alma991031749799707371 Chapter 1. What is Science? 2. Scientific reasoning 3. Explanation in science 6. Philosophical problems in physics, biology, and psychology 2). Malcolm Williams (2021) Realism and Complexity in Social Science, Routledge (Taylor & Francis Group). London and New York Chapters 1). Introduction 3). Complexity, probability, and necessity in the social world 4). Causes and Complexity <u>Reflection:</u> <i>In relation to Management and Organizations/IT/...</i> A) <i>How do you see the Philosophy of Management?</i> B) <i>What is the science of Management?</i> C) <i>How do we reason regarding management?</i> D) <i>How do we explain management science?</i> E) <i>What is the realism of management?</i>
--	---

<u>WEEK 2: 14/9/26</u> What is philosophy of business (& management)?	1). Lloyd Morey (1939) A Philosophy of Business Administration, The Journal of Higher Education, 10:2, 68-74, DOI: 10.1080/00221546.1939.11773636 2). Blok, V. What Is (Business) Management? Laying the Ground for a Philosophy of Management. Philosophy of Management 19, 173–189 (2020). https://doi.org/10.1007/s40926-019-00126-9 3). Donaldson, T., & Walsh, J. P. (2015). Toward a theory of business. Research in Organizational Behavior, 35, 181-207. <u>Reflection:</u> In relation to Management and Organizations/IT/.... F) Can you identify revolutions of Management science? G) What philosophical problems exist in Management science? H) What do the critics say about Management science?
<u>WEEK 3: 21/9/26</u> What is Research Design?	<u>READINGS</u> Aguinis, H. (2025). <i>Research Methodology: Best Practices for Rigorous, Credible, and Impactful Research</i>. Chapter 1: How to understand the Current Methodological Landscape Chapter 3: How to make Contributions to Theory Chapter 4: How to Plan Your Research. Bono, J.E., & McNamara, G. (2011). From the Editors: Publishing in AMJ-Part 2: Research Design. Academy of Management Journal, 54:4, 657-660. Köhler, T., Rumyantseva, M., & Welch, C. (2025). Qualitative restudies: Research designs for retheorizing. <i>Organizational Research Methods</i>, 28(1), 32-57. <u>Reflection:</u> 1). What methods are currently used in Management Science? 2). What are the various ways you can contribute? 3). What current issue is affecting research design? Assignment 1 due this week.
<u>WEEK 4: 28/9/26</u> What is the CONTEXT of your study?	<u>REQUIRED READING</u> Johns, G. (2006). The essential impact of context on organizational behavior. Academy of management review, 31(2), 386-408. Johns, G. (2018). Advances in the treatment of context in organizational research. Annual Review of Organizational Psychology and Organizational Behavior, 5, 21- 46. Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K. J. Klein & S. W. J. Kozlowski (Eds.), Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions (pp. 3–90). Jossey-Bass/Wiley. Bamberger, P. (2008). From the editors beyond contextualization: Using context

	theories to narrow the micro-macro gap in management research. <i>Academy of Management Journal</i>, 51(5), 839-846. Reflection: 1). How significant is context in science? 2). What is the role of context in theorizing? 3). How do you build context into research design?
WEEK 5: 5/10/26 At what level is your study?	REQUIRED READING Aguinis, H. (2025). <i>Research Methodology: Best Practices for Rigorous, Credible, and Impactful Research</i>. Ch. 10: How to Conduct Quantitative Analysis, Part II. Multilevel Modeling. Eckardt, R., Yammarino F. J, Dionne, S. D., & Spain, S. M. (2021). Multilevel Methods and statistics: The Next Frontier. <i>Organizational Research Methods</i>, 24(2): 187-218. Hofmann, D.A. (2004). Issues in multilevel research: Theory development, measurement, and analysis. In S.G. Rogelberg (Ed.). <i>Handbook of Research Methods in Industrial and Organizational Psychology</i>. pp 247-274. Blackwell Publishing Ltd.: Malden: MA. Eckardt, R., Yammarino, F.J., Dionne, S.D., & Spain, S.M. (2021). Multilevel methods and statistics: The next frontier. <i>Organizational Research Methods</i>, 24(2), 187-218. Kunze, F., Boehm, S.A., & Bruch, H. (2021). It matters how old we feel in organizations: Testing a multilevel model of organizational subjective-age diversity on employee outcomes. <i>Journal of Organizational Behavior</i>. 42(4), 448-463. Reflection: 1). How significant is the level of theorizing in science? 2). What are the levels at which research can be designed? 3). How do you build levels into research design?
Week 6: 12/10/26 How RELIABLE are your measures?	REQUIRED READINGS Aguinis, H. (2025). <i>Research Methodology: Best Practices for Rigorous, Credible, and Impactful Research</i>. Ch. 6: How to Measure Your Variables. Guion, R.M. (2004). Validity and reliability. In S.G. Rogelberg (Ed.). <i>Handbook of Research Methods in Industrial and Organizational Psychology</i>. pp 57-76. Blackwell Publishing Ltd.: Malden: MA. Revelle, W., & Condon, D. M. (2019). Reliability from α to ω: A tutorial. <i>Psychological assessment</i>, 31(12), 1395. Lee, P., Son, M., Zhou, S., Joo, S., Jia, Z., & Cheng, V. (2025). The journey of forced choice measurement over 80 years: Past, present, and future. <i>Organizational Research Methods</i>, 28(4), 680-722.

	Reflection: 1). How significant is reliability in measurement? 2). What are the various ways to determine reliability of a measure? Parameters of a New Study for Presentation (by instructor)
Week 7: 19/10/26 How Valid are your measures?	REQUIRED READINGS MacKenzie, S.B., Posakoff, P.M., & Podsakoff, N.P. (2011). Construct measurement and validation procedures in MIS and behavioral research: Incorporating new and existing techniques. <i>MIS Quarterly</i>, 35, 293-334. Stone-Romero, E.F. (2004). The relative validity and usefulness of various empirical research designs. In S.G. Rogelberg (Ed.). <i>Handbook of Research Methods in Industrial and Organizational Psychology</i>. pp 77-98. Blackwell Publishing Ltd.: Malden: MA. Love, E., Ceranic Salinas, T. & Rotman, J.D. (2020). The ethical standards of judgment questionnaire: Development and validation of independent measures of formalism and consequentialism. <i>Journal of Business Ethics</i>. 161, 115-132. Johnson, R.E., Rosen, C.C. & Chang, C-H (2011). To aggregate or not to aggregate: Steps for developing and validating higher-order multidimensional constructs. <i>Journal of Business & Psychology</i>, 26: 241-248. Colquitt, J.A., George, G., (2011). From the Editors: Publishing in AMJ – Part 1: Topic Choice, <i>Academy of Management Journal</i>, 54:3, 432-435 Reflection: 1). How significant is validity in science? 2). What are the ways to determine the validity of a measure? 3). How does validity relate to reliability? Assignment 2 due this week.
Week 8: 26/10/26	<u>Presentations on Study Design (In class).</u>
Week 9: 2/11/26 Method Bias	REQUIRED READINGS Aguinis, H. (2025). <i>Research Methodology: Best Practices for Rigorous, Credible, and Impactful Research</i>. Ch. 11: How to Conduct Quantitative Analysis, Part III: Meta Analysis. Podsakoff, P.M., MacKenzie, S.B, Lee, J.Y., & Podsakoff, N.P. (2003). Common method bias in behavioral research: A critical review of the literature and recommended remedies. <i>Journal of Applied Psychology</i>, 88, 879-903.

	Conway, J.M. & Lance, C.E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. <i>Journal of Business & Psychology</i>, 25: 325-334. Podsakoff, N.P., Whiting, S.W., Welsh, D.T., & Mai, K.M. (2013). Surveying for “artifacts”: The susceptibility of the OCB-performance evaluation relationship to common rater, item, and measurement context effects. <i>Journal of Applied Psychology</i>, 98(5), 863-874. Blevins, D. P., Skandera, D. J., & Ragozzino, R. (2026). Understanding Relative Differences with Magnitude-Based Hypotheses: A Methodological Conceptualization and Data Illustration. <i>Organizational Research Methods</i>, 29(3), 350-378. Reflection: 1). What is method bias? 2). What are the ways in which method bias manifest? 3). How do you assess method bias?
<u>Week 10: 9/11/26</u> Control Variables and Dynamics	<u>REQUIRED READINGS</u> Aguinis, H. (2025). <i>Research Methodology: Best Practices for Rigorous, Credible, and Impactful Research</i>. Ch. 8: How to Prepare Your Data for Analysis Ch. 9: How to Conduct Quantitative Analysis, Part I: Regression-Based Approaches. Hünermund, P., & Louw, B. (2025). On the nuisance of control variables in causal regression analysis. <i>Organizational Research Methods</i>, 28(1), 138-151. Mändli, F., & Rönkkö, M. (2025). To omit or to include? Integrating the frugal and prolific perspectives on control variable use. <i>Organizational Research Methods</i>, 28(1), 114-137. Cornelissen, J. P., & Werner, M. (2026). What are mechanisms? Ways of conceptualizing and studying causal mechanisms. <i>Organizational Research Methods</i>, 29(2), 147-176. Kalnins, A. (2024). Should moderated regressions include or exclude quadratic terms? Present both! Then apply our linear algebraic analysis to identify the preferable specification. <i>Organizational Research Methods</i>, 27(1), 29-63. Reflection: 1). Why do control variables matter? 2). How do you handle control variables in research design? 3). Why do dynamics matter? 4). What are the various forms of dynamics in Management Science?

Week 11: 16/11/26 Sampling (including ESM) & Experiments	<u>REQUIRED READINGS</u> Aguinis, H. (2025). <i>Research Methodology: Best Practices for Rigorous, Credible, and Impactful Research</i>. A). Sampling Ch. 5: How to Collect Your Sample Using Surveys and Other Means. Ch. 12: How to Conduct Quantitative Analysis, Part IV: Advanced Techniques Aguinis, H., Hill, N.S., & Baily, J.R. (2021). Best practices in data collection and preparation: Recommendations for reviewers, editors, and authors. <i>Organizational Research Methods</i>, 24(4), 678-693. Experience sampling Gabriel, A.S., Podsakoff, N.P., Beal, D.J., Scott, B.A., Sonnentag, S., Trougakos, J.P., & Butts, M.M. (2019). Experience sampling methods: A discussion of critical trends and considerations for scholarly advancement. <i>Organizational Research Methods</i>. 22(4), 969-1106. B). Experiments. Aguinis, H. (2025). <i>Research Methodology: Best Practices for Rigorous, Credible, and Impactful Research</i>. Ch. 7: How to Design and Conduct Experimental Research Highhouse, S. (2009). Designing experiments that generalize. <i>Organizational Research Methods</i>. 12(3), 554-566. Schabram, K. F., Myers, C. G., & Hardin, A. E. (2026). Manipulation in organizational research: On executing and interpreting designs from treatments to primes. <i>Organizational Research Methods</i>, 29(2), 177-201. <u>Reflection:</u> 1). What are the various ways to sample? 2). Does it matter to sample? 3). How unique is ESM? 1). Why are experiments the gold standard of science? 2). What are the various types of experiments? ASSIGNMENT 3 due at midnight
Week 12: 23/11/26 Policy Capturing, & Ethics Final Exam (In Class) Part 1: 30 minutes	<u>REQUIRED READINGS</u> A). Policy Capturing Aiman-Smith, L., Scullen, S.E., & Barr, S.H. (2002). Conducting studies of decision making in organizational contexts: A tutorial for policy-capturing and other regression-based techniques. <i>Organizational Research Methods</i>, 5(4), 388-414.

	B). Ethics. Aguinis, H. (2025). <i>Research Methodology: Best Practices for Rigorous, Credible, and Impactful Research</i>. Ch. 15: How to Improve the Transparency, Reproducibility, and Replicability of your research. Murphy, K.R. & Aguinis, H. (2019). HARKing: How badly can cherry-picking and question trolling produce in published results? <i>Journal of Business and Psychology</i>. 34: 1-17. Vancouver, J.B. (2018). In Defense of HARKing. <i>Industrial & Organizational Psychology</i>, 111:1, 73-80. Reflection: 3). What are the origins of policy capturing? 4). What are the various ways to conduct policy capturing? 1). Why do ethics matter? 2). What are the challenges of ethics in Management Science? 3). Why is HARKing a concern in Management Science? Part 1: Final Exam
<u>Week 13: 30/11/26</u>	Exam Preparation
<u>Week 14: 8/12/26</u>	Final Exam Due Please adhere to instructions in the exam.