

RRBM Responsible Research in Business & Management

Doctoral seminar

RRBM001: Philosophical Foundations of Responsible Research

Fall 2022

Syllabus version: 20 April 2022

Professor: Anne Tsui

Office hours (on Zoom): By appointment; send me an email to arrange

email: anne.tsui@asu.edu

Schedule: 8:30am-11:15am (Arizona Time)

Ten sessions:

Class 1: Tue, Aug 23

(Aug 30, no class)

Class 2. Tue, Sep 6

Class 3. Tue, Sep 13

(Sept 20, no class)

Class 4. Tue, Sep 27

Class 5. Tue, Oct 4

(Oct 11, no class)

Class 6. Tue, Oct 18

Class 7. Tue, Oct 25

(Nov 1, no class)

Class 8. Tue, Nov 8

Class 9: Tue, Nov 15

(Nov 22, no class)

Class 10: Tue, Nov 29

In Conjunction With: This class will be held in conjunction with a course being offered by the Department of Management, WP Carey School of Business, Arizona State University taught by Prof. Don Lange, allowing students to learn from each other across those two courses. This RRBM course will be taught by an instruction team consisting of Professor Anne Tsui and others.

Course goals and overview

The two-credit equivalent course is for doctoral students in business and management. It is suitable for doctoral students in all disciplines within the business school, including accounting, finance, management, marketing, operations management, supply chain, information systems, and related areas.

This course is an introduction to scientific research on business and management. It focuses on the philosophical foundations of empirical science. These foundational issues are central to the work of a scientist in constructing understandings and explanations of important phenomena in our natural and social world. The issues pervade both natural and social sciences and they help us gain clarity on the role of scientific research in advancing the practice of business and management, and to understand how organizations may influence the wellbeing of both those working in them and those affected by them, i.e., employees, consumers, and society. Misunderstandings about the philosophical foundations of empirical science can impede our scientific work, stall scientific discoveries, and impair knowledge to inform practice.

This course focuses on the responsibility of scientists to produce credible knowledge for addressing societally important problems—a mission of the “Responsible Research in Business and Management” movement (www.rrbm.network). Many journals have introduced editorial policies to improve the reliability of empirical findings, echoing the call by the Center for Open Science (www.cos.io) on the importance of openness, transparency, and reproducibility. There is also momentum to focus on solving problems in the world, rather than only on exploring interesting ideas and making novel discoveries—often focusing on trivial problems with small effects. This course prepares students to focus their research from “That’s interesting” to “That’s important”—echoing a call by the editor of the *Academy of Management Journal*, Laszlo Tihanyi, in the April 2020 issue. This is a call in many business disciplines (management, marketing, operations, accounting, finance) as is evident by special issues and awards for responsible research (see RRBM website for information on these initiatives.)

Learning outcomes

Four learning goals (critical thinking; communication; discipline specific knowledge; and ethical leadership or global leadership) are addressed in this course. The fourth goal, pertaining to gaining ethical leadership knowledge and skills, is of particular importance in this course.

At the successful completion of this course, you will have deeper understanding of the answers and nuances pertaining to these questions:

- What is scientific reasoning and explanation?
- What are the unique challenges in social science relative to natural science?
- How does progress and development in scientific knowledge come about?
- What role do values play in science?
- How does science contribute to both the progress and the demise of the human condition?
- How can we as budding scientists contribute to the progress in the science in business and management, and progress in humanity through our research?
- What does it mean to be a responsible social scientist in the business disciplines?

Course materials

Books

- Douglas, Heather E. (2009). *Science, policy, and the value-free ideal*. Pittsburgh: University of Pittsburgh Press.

- Kuhn, Thomas S. (1996). *The structure of scientific revolutions* (3rd ed.). Chicago: University of Chicago Press.
- Okasha, Samir. (2016). *Philosophy of science: A very short introduction* (2nd ed.). Oxford, UK: University of Oxford Press.
- Risjord, Mark (2014). *Philosophy of social science: A contemporary introduction*. New York: Routledge.

Articles or book chapters

1. Chandy, Rajesh K., Venkataramani Johar, Gita, Moorman, Christine, & Roberts, John H. (2021). Better marketing for a better world. *Journal of Marketing*, 85(3), 1-9.
2. Davis, Gerald F. (2015). Editorial essay: What is organizational research for? *Administrative Science Quarterly*, 60(2), 179-188.
3. Ghoshal, Sumantra. (2005). Bad management theories are destroying good management practices. *Academy of Management Learning & Education*, 4(1), 75-91.
4. Godfrey-Smith, Peter. (2003). Chapter 4: Popper, conjecture, and refutation. In *Theory and reality: An introduction to the philosophy of science* (pp. 57-74).
5. Godfrey-Smith, Peter. (2003). Chapter 7: Lakatos, Laudan, Feyerabend, and frameworks. In *Theory and reality: An introduction to the philosophy of science* (pp. 102-121).
6. Merton, Robert K. (1973). The normative structure of science. In N. W. Storer (Ed.), *The Sociology of Science. Theoretical and Empirical Investigations* (pp. 267-278). Chicago: University of Chicago Press (Originally published as "Science and technology in a democratic order" *Journal of Legal and Political Sociology* I:115-126 (1942).
7. Rajgopal, Shiva. (2020). Integrating practice into accounting research. *Management Science, Published online in Articles in Advance 14 Sep 2020*. <https://doi.org/10.1287/mnsc.2020.3590>.
8. Tang, Christopher S. (2016). OM forum—Making OM research more relevant: “Why?” and “how?”. *Manufacturing & Service Operations Management*, 18(2), 178-183.
9. Tsui, Anne S. (2016). Reflections on the so-called value-free ideal: A call for responsible science in the business schools. *Cross Cultural & Strategic Management*, 23(1), 4-28.
10. Tsui, Anne S. & McKiernan, Peter. (2022). Understanding scientific freedom and scientific responsibility in business and management research. *Journal of Management Studies*, in press.

Readings on Responsible Research in Business and Management

1. Co-founders of RRBM. (2020 (revised from 2017)). *A vision for responsible research in business and management: Striving for useful and credible knowledge*: Responsible Research in Business and Management. Download from https://rrbm.network/wp-content/uploads/2020/04/Position-Paper_revised_8April2020.pdf.
2. United Nations Sustainable Development Goals. Students can use this resource to identify possible problems to study. Read at: <https://sustainabledevelopment.un.org/?menu=1300>
3. *Academy of Management Discoveries* special issue on “Sustainable Development for a Better World”, December 2019. There are eight articles on a variety of topics, all related to one or more of the sustainable development goals. See: <https://journals.aom.org/toc/amd/5/4>
4. *Journal of Marketing* special issue on “Better Marketing for a Better World”, 2021, vol 85, issue 3. There are 14 articles on a variety of topics. See <https://journals.sagepub.com/toc/jmxa/85/3>.
5. Award winning articles for Responsible Research in Management, Marketing, and Operations Management. See the list of winning papers at: www.rrbm.network/actions/awards.
6. The Readings/Articles section of the RRBM website has many current articles discussing problems of credibility and problems of irrelevance (lacking usefulness). Students are encouraged to read these to deepen their knowledge and to use this resource for their debate assignments. www.rrbm.network/readings/articles.

Other references (including additional philosophy of science resources, and articles on credibility and usefulness of research, indigenous research, and contextualization)

1. Bettis, Richard A., Ethiraj, Sendil, Gambarella, Alfonso, Helfat, Constance, & Mitchell, Will. (2016). Creating repeatable cumulative knowledge in strategic management: A call for a broad and deep conversation among authors, referees, and editors. *Strategic Management Journal*, 37(2), 257–261.
2. Hambrick, Donald C. (2007). The field of management's devotion to theory: Too much of a good thing? *Academy of Management Journal*, 50, 1346-1352.
3. Kaplan, Abraham. (2017 (1964)). *The conduct of inquiry: Methodology for behavioral science*. New York: Routledge.
4. Kohli, Ajay. K., & Haenlein, Michael. (2021). Factors affecting the study of important marketing issues: Implications and recommendations. *International Journal of Research in Marketing*, 38(1), 1-11.
5. Lewin, Arie Y., Chiu, Chi-Yue, Fey, Carl F., Levine, Sheen S., McDermott, Gerald, Murmann, Johan Peter, & Tsang, Eric. (2016). The critique of empirical social science: New policies at Management and Organization Review. *Management and Organization Review*, 12(4), 649-658.
6. Pfeffer, Jeffrey. (1993). Barriers to the advance of organizational science: Paradigm development as a dependent variable. *Academy of Management Review*, 18(4), 599-521.
7. Popper, Karl R. (2002 (1959)). *The logic of scientific discovery*. New York: Routledge.
8. Tsui, Anne S. (2004). Contributing to global management knowledge: A case for high quality indigenous research. *Asia Pacific Journal of Management*, 21(4), 491-513.
9. Tsui, Anne S. (2006). Contextualization in Chinese management research. *Management and Organization Review*, 2006, 2(1), 1-13.
10. Tsui, Anne S. (2021a). Usefulness, credibility and scientific norms: Reflections on our third responsibility. *Die Unternehmung - Swiss Journal of Business Research and Practice*, 75(2), 177-187.
11. Tsui, A.S. (2022). From traditional research to responsible research: The necessity of scientific freedom and scientific responsibility for better societies. *Annual Review of Organizational Psychology and Organizational Behavior*, 9: 1-32.
12. Van de Ven, Andrew H. (2007). *Engaged scholarship: A guide for organizational and social research*. Oxford, UK: Oxford University Press.

Course content

Modules (4)

The course has four modules, roughly two sessions for each module, for a total of ten sessions.

1. Introduction to responsible research and philosophy of science and social science (Sessions 1-3)
2. Alternative frameworks of progress in science (Sessions 4-5)
3. Science responsibility, objectivity, policy, and society (Sessions 6-7)
4. Responsible research in business and management (Sessions 8-9)

Session 10 is for presentation and discussion of your research proposal.

Course Assignments

1. Team's 5-6 bullet points of the assigned reading and leading discussion of the reading during class.
 2. Team's participation in one debate and a written debate statement
 3. An individual "Preliminary research proposal" to be presented in Session 10 (written submission is optional)
- See the Appendices for further details on the assignments

Teams

1. Each student will be assigned to one of six teams.
2. Each team will be responsible for leading a discussion on one or two readings in each class session, for a total of 7 times.
3. Each team will participate in one debate.

Course Schedule Overview

(T1=team 1, T2=team 2, etc.)

Session	Topic (lead instructors)	Readings (50 total)	Discussion leading teams
1	Introduction to responsible research and philosophy of science and social science (Don Lange, Anne Tsui)	RRBM position paper Okasha: 1, 2, 3, 4	T1 (O2), T2 (O3), T3 (O4) All students read: RRBM position paper and Okasha ch 1
2	Philosophy of social science 1 (Don Lange, Anne Tsui)	Risjord: 1, 2, 3, 4, 5, 6	T4, T5, T6, T1, T2, T3 (1 chapter each team)
3	Philosophy of social science 2 (Don Lange, Anne Tsui) **Debate 1	Risjord: 7, 8, 9	T4, T5, T6 (1 ch each team) Debate 1: T1 & T2
4	Scientific progress 1 (Don Lange, tdd)	Kuhn: 1-10	T1 to T5 (2 chapters each team)
5	Scientific progress 2 (Don Lange, tbd) **Debate 2	Kuhn: 11-12 Goldfrey-Smith: 4, 7	T6 (ch 11&12) Debate 2: T3 & T4
6	Responsibility, objectivity and values (Don Lange, tbd)	Douglas: 3, 4, 5, 6 Merton (1973); Tsui (2016)	T3 (D3) T4 (D4) T5 (D5&D6) T6 (M&T)
7	Science, Policy and Society (Don Lange, tbd) **Debate 3	Douglas: 1, 2, 7, 8	T1 to T4 (one ch each) Debate 3: T5 & T6
8	Challenges in business research (Don Lange, tbd)	Articles 1-6	T1 to T6 (one article each) Guest faculty panel
9	Analyzing award winning papers in responsible research in management and marketing (Don Lange, tbd)	One paper from <i>AMD</i> or <i>JM</i> special issues, or the award-winning papers in marketing, management & OM	All students: UNGC SDG website; RRBM website T1 to T6 (1 award paper each)
10	Proposal presentations and conclusion (Don Lange, Anne Tsui and others)	Three separate rooms, with 7 students each room	Final paper presentations

Course Schedule in Detail

Session 1: Introduction to philosophy of science and social science

Purpose: To introduce the Responsible Research in Business and Management movement, two types of scientific reasoning and the meaning of “truth” in scientific research.

Readings:

1. RRBM position paper.
2. Okasha Chapter 1– What is science
3. Okasha Chapter 2 – Scientific reasoning
4. Okasha Chapter 3 – Explanation in science
5. Okasha Chapter 4 – Realism and anti-realism

Written assignment and discussion:

- As an individual student, your job is to read *all* of the readings and be ready for class discussion. In addition, your team will be assigned as a discussion leader for a particular reading in certain class sessions. So, here is how to prepare for that:
 - ❖ Meet with your team after each member has read the material.
 - ❖ Together, write 5-6 bullet points of key ideas for your assigned reading (take-aways).
 - Post your bullet points in a word file on our shared drive at least 24 hours prior to class
 - ❖ Prepare one question for discussion in class.
 - A good discussion question is thought-provoking. Try to avoid questions that would simply require someone in the class to summarize something from the reading. “Why” or “how” questions are good. You might also try to make connections with something we’ve discussed in the course.
 - ❖ During the class discussion, your team will begin with a very brief overview of the reading (no more than 5 min). Remember that we’ve all read the material, so you are just providing a quite

reminder and orientation as a basis for the discussion. This means that you will basically cover your bullet points. Then your team will lead the class discussion using your prepared question.

- For now, try to keep the discussion from heading into how the ideas would be applied, and away from delving into contrasting or complementary views from other sources. The current goal is to develop a good understanding of the material as presented.

Session 2: Philosophy of social science 1

Purpose: To begin exploring the nature of the social world and the ways in which social and natural science may be similar or different, and implications for understanding and explanation.

Readings - Risjord (2014)

1. Chapter 1 – Introduction
2. Chapter 2 – The possibility of a social science
3. Chapter 3 – Theories, interpretations, and concepts
4. Chapter 4 – Interpretive methodology
5. Chapter 5 – Action and agency
6. Chapter 6 – Reductionism: structure, agents, and evolution

- **Written assignment and discussion: See session 1 instructions**

Session 3: Philosophy of social science 2 (debate 1)

Readings - Risjord (2014)

1. Chapter 7 – Social norms
2. Chapter 8 – Intentions, institutions, and collective actions
3. Chapter 9 – Causality and law in the social world

- **Written assignment and discussion: See session 1 instructions**

Debate 1 (teams 1 and 2): “Social science is not different from natural science in terms of the goals of explanation, prediction, and seeking truth, as well as epistemology, ontology, and observational methods.” Take the position either FOR or AGAINST this statement and present your best arguments (citing relevant literature or evidence) to defend your position. (See the Appendix for details.)

Session 4: Scientific progress and change 1

Readings - Kuhn (1996)

1. Chapter 1 – A role for history
2. Chapter 2 – The route of normal science
3. Chapter 3 – The nature of normal science
4. Chapter 4 – Normal science as puzzle solving
5. Chapter 5 – The priority of paradigms
6. Chapter 6 – Anomaly and emergence of scientific discoveries
7. Chapter 7 – Crisis and emergence of scientific theories
8. Chapter 8 – The response to crisis
9. Chapter 9 – The nature and necessity of scientific revolutions
10. Chapter 10 – Revolutions as changes of world view

- **Written assignment and discussion: See session 1 instructions**

Session 5: Scientific progress and change 2 (debate 2)

Readings - Kuhn (1996):

1. Chapter 11 – The invisibility of revolutions
2. Chapter 12 – The resolution of revolutions
3. Popper chapter 4 from Godfrey-Smith book
4. Lakatos chapter 7 from Godfrey-Smith book

- **Written assignment and discussion: See session 1 instructions**

Debate 2 (teams 3 and 4): “Scientific change and scientific progress is slow because normal science and paradigms constraint the vision and worldview of scientists.” Take the position either FOR or AGAINST this statement and present your best arguments (citing relevant literature or evidence) to defend your position.

Session 6: Responsibility, objectivity and values

Readings - Douglas (2009):

1. Chapter 3 – Origins of the value-free idea for science
2. Chapter 4 – The moral responsibilities of scientists
3. Chapter 5 – The structure of values in science
4. Chapter 6 – Objectivity in science
5. Merton (1973) – Normative structure of science
6. Tsui (2016) – Reflections on the value-free ideal

- **Written assignment and discussion: See session 1 instructions**

Session 7: Science, Policy and Society (debate 3)

Readings: Douglas (2009)

1. Chapter 1 – Science wars and policy wars
2. Chapter 2 – The rise of the science advisor
3. Chapter 7 – The integrity of science in the policy process
4. Chapter 8 – Values and practices

- **Written assignment and discussion: See session 1 instructions**

Debate 3 (Teams 5 and 6): “Science should be judged on epistemic values only. Social or contextual values should be avoided in good science.” Take the position FOR or AGAINST this statement and present your best argument (citing relevant literature or evidence, and examples from your field of study) and defend your position.

Session 8: Challenges in Business Research

Guest faculty panel

Readings:

1. Chandy, Rajesh K., Venkataramani Johar, Gita, Moorman, Christine, & Roberts, John H. (2021). Better marketing for a better world. *Journal of Marketing*, 85(3), 1-9.
2. Davis, Gerald F. (2015). Editorial essay: What is organizational research for? *Administrative Science Quarterly*, 60(2), 179-188.
3. Ghoshal, Sumantra. (2005). Bad management theories are destroying good management practices. *Academy of Management Learning & Education*, 4(1), 75-91.
4. Rajgopal, Shiva. (2020). Integrating practice into accounting research. *Management Science*, Published online in *Articles in Advance* 14 Sep 2020. <https://doi.org/10.1287/mnsc.2020.3590>.
5. Tang, Christopher S. (2016). OM forum—Making OM research more relevant: “Why?” and “how?”. *Manufacturing & Service Operations Management*, 18(2), 178-183.
6. Tsui, Anne S. & McKiernan, Peter. (2022). Understanding scientific freedom and scientific responsibility in business and management research. *Journal of Management Studies*, in press.

- **Written assignment and discussion: See session 1 instructions**
- **Each student prepares one or two questions for the faculty panel to respond to.**

Session 9: Responsible Research in Business and Management

Readings:

1. The 17 Sustainability Development Goals on the United Nations Global Compact. Read at: <https://sustainabledevelopment.un.org/?menu=1300>
2. *Academy of Management Discoveries* special issue on “Sustainable Development Goals”. <https://journals.aom.org/toc/amd/5/4>
3. *Journal of Marketing* special issue on “Better Marketing for a Better World”. <https://journals.sagepub.com/toc/jmxa/85/3>
4. Award winning papers in Management, Marketing, or Operations Management on this webpage: www.rrbm.network/actions/awards.

Written assignment and discussion:

- Each team writes a one-page summary of one article in the form of bullet points of key ideas (take-aways). Try to coordinate among teams to avoid choosing the same article, if possible.

- In addition, answer these two questions for the paper:
 - a. How does this paper relate to any of the 17 SDGs?
 - b. How does this paper exemplify any of the seven principles of responsible research?

Put the summaries on the shared drive at least 24 hours in advance of the session.

Session 10: Presentation and Conclusion

Each student delivers a maximum 15-minute presentation of his/her research proposal with 5 minutes for feedback and discussion. We may use three separate rooms, with seven students in each room. See Appendix below for detailed instruction on this Assignment 3.

Appendix: Detailed Explanations on the Three Assignments

Assignment 1: Chapter or article summaries and discussion

Being prepared is extremely important for a good discussion and learning. We expect every student to contribute to the discussion, and be well prepared to discuss the core ideas.

As an individual student, your job is to read *all* of the readings and be ready for class discussion. In addition, your team will be assigned as a discussion leader for a particular reading in certain class sessions. So, here is how to prepare for that:

- Meet with your team after each member has read the material.
- Together, write 5-6 bullet points of key ideas for your assigned reading (take-aways).
 - ❖ Post your bullet points in a word file on our shared drive at least 24 hours prior to class
- Prepare one question for discussion in class.
 - ❖ A good discussion question is thought-provoking. Try to avoid questions that would simply require someone in the class to summarize something from the reading. “Why” or “how” questions are good. You might also try to make connections with something we’ve discussed in the course.
 - ❖ During the class discussion, your team will begin with a very brief overview of the reading (no more than 5 min). Remember that we’ve all read the material, so you are just providing a quite reminder and orientation as a basis for the discussion. This means that you will basically cover your bullet points. Then your team will lead the class discussion using your prepared question.
 - ❖ For now, try to keep the discussion from heading into how the ideas would be applied, and away from delving into contrasting or complementary views from other sources. The current goal is to develop a good understanding of the material as presented.

Assignment 2: Debates (in teams)

Each team should prepare an opening statement outlining the key arguments in support of its position on the debate. The statement should be one single-spaced page or about 500 words. Send the opening statement to the class 24 hours before the session when the debate will occur.

The pro team will make a 10-minute argument in favor of the given statement. The con team will make a 10-minute argument against the statement. Then, the Con team and the class can question the Pro team for 10 minutes, followed by questioning of the Con team by the Pro team and the class for 10 minutes. The class will continue discussing the debate while the two teams prepare (in a breakout room for 5 minutes) a 5-minute closing statement to summarize their key arguments (taking into account the information emerged from the questioning period).

The teams will decide the debate position at the end of the class a week before the debate.

Assignment 3: A preliminary research proposal (individual)

Your assignment for our final class session (Session 10) is to present your research proposal idea to the class (15 minutes for each student). A suggested format for your presentation is:

1. Introduce the class to the academic and practical conversation you are aiming to join
2. Point out the puzzle or complication within that conversation that you would like to address with your study
3. Explain the value and importance of addressing that puzzle or complication
4. Describe your planned approach. This will be an excellent time to draw on learning from our course.

5. Explain how your study will make a contribution, how it will be meaningful and helpful for not only the people who study things, but also for the people who get studied

To develop your proposal idea, identify one or more goals from among the 17 UN SDGs and develop a research question around that goal. The question should ideally involve a puzzle (begins with the word “Why” or “How”) involving issues around the goal and the answer to that puzzle may have policy or practice implications. For example, you might be interested in the goal of “zero poverty” (Goal 1). How can business, non-profit or governmental agencies contribute to the alleviation of poverty in a region or community? You might be interested in health and well-being (Goal 3). Why are some employers willing to invest in employee and community well-being more than other employers? There is something for everyone in these 17 goals. More than ten of them have implications for researchers in all the business disciplines. Business, government or non-governmental non-profit agencies are the primary agencies to implement these goals. Identify one goal that appeals to you and that fits your disciplinary background or personal preference.

We suggest a few resources to get you started. (1) The first is the *Academy of Management Discoveries* special issue on the Sustainable Development Goals (December 2019). (2) The second is the *Journal of Marketing* special issue on “Better marketing for a better world” (April, 2021). (3) The third is the list of award-winning papers in Management, in Marketing and in Operations Management which can be found on the RRBM website: www.rrbm.network. You may see how they define research questions on some of the broad goals.

We suggest that you begin with reading the SDG website. Each SDG goal has several specific targets to be achieved by 2030 (<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>). These targets provide measurable outcomes which have implications on business actions. You might also check out the SDG Compass which “provides guidance for companies on how they can align their strategies as well as measure and manage their contribution to the realization of the SDGs” (<https://sdgcompass.org/business-indicators/>)

In formulating your research question and developing your research design, we would like you to pay special attention to the philosophy of science issues and the responsible research principles. This is the opportunity to apply what you learned in this course to designing empirical studies that will enhance your chance of reaching credible and replicable findings and offering knowledge that is potentially useful to solve practical problems in business and society.

OPTIONAL—paper submission.

If you would like to receive instructor feedback, we invite you to submit a written version of your proposal. The proposal should have the following sections:

1. Problem statement: Describe the SDG and the specific problem you are focusing on. This problem then becomes your research question. Try to make it either a Why or a How question. The why question allows you to identify and explain current practices and discover those that contribute to achievement of the goals. The how question allows you to identify the mechanism that links some practices to positive or negative outcomes.
2. Literature review and intended contribution: Provide 15 references directly related to the problem you are studying. Clarify how this research will contribute to the specific sustainable development goal, what new knowledge will be produced, and how our understanding will be
3. advanced (explanatory mechanisms).
4. Research design: Briefly description the population and region that your research is most relevant; the method of observation (data and measures, archival data, survey, or field or lab experimentation), the analysis and interpretation of the findings. Pay attention to the “context” (industry, country, profession, ownership, culture, etc.) of your research and explain how it might be relevant to understand or explain the problem (phenomenon). This will help you determine why your “treatment” (the cause or the correlate) is appropriate or would work for the outcomes you are trying to influence (e.g., the SDG goal or target). Discuss whether and how “external stakeholders” will be involved in the research.
5. Philosophy of science: Describe how this research project and research design consider the issues discussed in the Okasha, Risjord and Douglas books. A few examples of relevant issues may include the problems of induction and deduction, inductive risk, construct validity, ontology, interpretive and explanatory approaches, looping effect, instrumental rationality, reductionism, normativity, naturalism, under-determinism, methodological localism, situational determinism, multiple realizability, supervenience, causal explanations, etc. Focus on those most relevant for the phenomenon you aim to understand and explain.
6. Principles of responsible research: Describe how you consider the seven principles of responsible research in your problem choice, definition and research design. Tsui (2021b) may be a useful guide to develop your research proposal and design that will enhance your chance of producing credible findings and useful knowledge.

Grading and course requirements

Your course grade

Your final course grade will be an average of the grades you received on the graded elements of the course, all equally weighted: Assignments 1, 2, and 3, and participation in class.

Participation in Class

Your learning and the learning of your classmates is affected by your class participation. In addition, the classroom is the place for you to practice speaking up and expressing, testing, and defending your ideas. Your active involvement will increase the amount you remember, how well you are able to integrate new material with prior material, and your ability to draw analogies so that you can apply your learning to new situations. Your participation will add to your enjoyment and learning, and add to everyone's learning. It will sharpen your ability to think on your feet and strengthen your communication skills. In addition, much of the learning in this course is conveyed during the class sessions.

A caveat and a copyright notice

The information in this syllabus, with the exception of grade and absence policies, is subject to revision during the course if I find it necessary. Any changes I make will be in the spirit of increasing opportunities for clarity, learning, or fairness. If I make any substantive changes I'll give you notice on Canvas.

All course content provided by me—including lectures in class and including recordings or videos provided or made in class, as well as written materials distributed to the class—is under copyright protection. The selling or other commercialization of recordings or notes derived from class lectures in this course is prohibited.

Important notes about academic integrity

The expectations for this course are that you do your own original individual work on all any individual assignments and that your team does its own original work on the team assignments. You may not submit as your own work the work of others, even if you modify and personalize it, including reflections, analyses, or solutions found on the internet. By submitting your assignments under your name, you are affirming that the contents are your original work. We take the academic integrity very seriously. Failure to follow these policies will result in zero points for the relevant assignment as well as other possible sanctions.