Doctoral seminar

RRBM001: Philosophical Foundations of Responsible Research

Fall 2021
Syllabus version: 10 Feb 2021

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, Sept 14
Class 2. Tue, Sep 21
Class 3. Tue, Sep 28
Class 4. Tue, Oct 5
Class 5. Tue, Oct 19 (note that there is no class on Tue, Oct 12)
Class 6. Tue, Oct 26
Class 7. Tue, Nov 2
Class 8. Tue, Nov 9
Class 9: Tue, Nov 16
Class 10: Tue, Nov 23

Classroom: This class will be held online, via Zoom.

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.

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 understanding and explanation 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 firms 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” – a call by the new editor in chief of the Academy of Management Journal in the April 2020 issue. This is a call in many business disciplines (marketing, operations, accounting, finance) as evident by special issues and awards for responsible research (see RRBM website for information on these initiatives.)
Learning outcomes

The W. P. Carey School of Business has established the following learning goals for its graduate students:
1) critical thinking; 2) communication; 3) discipline specific knowledge; and 4) ethical leadership or global leadership.

All four learning goals 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 a 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

Articles or book chapters


**Readings on Responsible Research in Business and Management**


2. Award winning articles for Responsible Research in Management and Responsible Research in Marketing from 2018 to present. Download papers at: www.rrbm.network/actions/awards.

3. 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.

4. United Nations Sustainable Development Goals. Students can use this resource to identify possible problems to study. Read at: https://sustainabledevelopment.un.org/?menu=1300

5. Academy of Management Discoveries has a special issue on the UN Sustainable Development Goals, 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

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


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 (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 the final paper on a research proposal.

Course Assignments
1. Team’s one-page summaries of the key ideas in the assigned readings
2. Team’s participation in one debate and a written debate statement
3. An individual “Preliminary research proposal”

See the below for further details on the assignments.

Teams
1. There will be six teams in each class section.
2. Each team will be responsible for leading discussion on two or more readings each session.
3. Each team will participate in one debate.

Course Schedule Overview
(T1=team 1, T2=team 2, etc.)

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
<th>Readings (50 total)</th>
<th>Discussion leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to responsible research and philosophy of science and social science</td>
<td>RRBM position paper Okasha: 1, 2, 3, 4 Risjord: 1, 2</td>
<td>T1, T2, T3 2 readings each team</td>
</tr>
<tr>
<td>2</td>
<td>Philosophy of social science 1</td>
<td>Risjord: 3, 4, 5, 6</td>
<td>T4, T5 2 readings each team</td>
</tr>
<tr>
<td>3</td>
<td>Philosophy of social science 2 (debate 1)</td>
<td>Risjord: 7, 8, 9 Total 3 readings</td>
<td>T6 - 2 readings Debate 1: T1 &amp; T2</td>
</tr>
<tr>
<td>4</td>
<td>Scientific progress 1</td>
<td>Kuhn: 2-7; Goldfrey-Smith: 4, 7</td>
<td>T1, T2 4 readings each team</td>
</tr>
<tr>
<td>5</td>
<td>Scientific progress 2 (debate 2)</td>
<td>Kuhn: 8-12</td>
<td>T5, T6 (4 each team) Debate 2: T3 &amp; T4</td>
</tr>
<tr>
<td>6</td>
<td>Responsibility, objectivity and values</td>
<td>Douglas: 3, 4, 5, 6; Merton (1973)</td>
<td>T3, T4 - 2 readings each; All teams: Merton</td>
</tr>
<tr>
<td>7</td>
<td>Science, Policy and Society (debate 3)</td>
<td>Douglas: 1, 2, 7, 8</td>
<td>T1, T2 Debate 3: T5&amp;T6</td>
</tr>
<tr>
<td>8</td>
<td>Challenges in business research</td>
<td>Articles 1-3, 5-10</td>
<td>T3, T4 (2 each) Guest faculty panel</td>
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<tr>
<td>9</td>
<td>Analyzing responsible research in management and marketing</td>
<td>Selected award winning or exemplary papers, AMD, SDG</td>
<td>T5, T6</td>
</tr>
<tr>
<td>10</td>
<td>Proposal presentations and conclusion</td>
<td></td>
<td>Final paper presentations</td>
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</tbody>
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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
6. Risjord Chapter 1 – Introduction
7. Risjord Chapter 2 – The possibility of a social science
Written assignment and discussion:
1. Each team writes a summary of one reading in the form of three to five bullet points of key ideas (takeaways) and offers one question for discussion in class. Send the summary to the classmates 24 hours in advance of the session.
2. Each team responsible for leading the discussion should provide a very brief highlight of the reading and discuss 3 to 4 of the questions from the students.

**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 3 – Theories, interpretations, and concepts
2. Chapter 4 – Interpretive methodology
3. Chapter 5 – Action and agency
4. Chapter 6 – Reductionism: structure, agents, and evolution

Written assignment and discussion:
1. Each team writes a summary of each reading in the form of three to five bullet points of key ideas (takeaways) and offers one question for discussion in class. Send the summaries to the classmates 24 hours in advance of the session.
2. Each team responsible for leading the discussion should provide a very brief highlight of the reading and discuss 3 to 4 of the questions from the students.

**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, discussion, and debate:
1. Each team writes a summary of each reading in the form of three to five bullet points of key ideas (takeaways) and offers one question for discussion in class. Send the summaries to the classmates 24 hours in advance of the session.
2. Each team responsible for leading the discussion should provide a very brief highlight of the reading and discuss 3 to 4 of the questions from the students.

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 a position either FOR or AGAINST this statement and present your best arguments (citing relevant literature or evidence) to defend your position.

**Session 4: Scientific progress and change 1**
Readings - Kuhn (1996)
1. Chapter 2 – The route of normal science
2. Chapter 3 – The nature of normal science
3. Chapter 4 – Normal science as problem solving
4. Chapter 5 – The priority of paradigms
5. Chapter 6 - Anomaly and emergence of scientific discoveries
6. Chapter 7 – Crisis and emergence of scientific theories
7. Lakatos chapter 4 from Godfrey-Smith book
8. Popper chapter 7 from Godfrey-Smith book

Written assignment and discussion:
1. Each team writes a summary of each reading in the form of three to five bullet points of key ideas (takeaways) and offers one question for discussion in class. Send the summaries to the classmates 24 hours in advance of the session.
2. Each team responsible for leading the discussion should provide a very brief highlight of the reading and discuss 3 to 4 of the questions from the students.
Session 5: Scientific progress and change 2 (debate 2)
Readings - Kuhn (1996):
1. Chapter 8 – The response to crisis
2. Chapter 9 – The nature and necessity of scientific revolutions
3. Chapter 10 – Revolutions as changes of world view
4. Chapter 11 – The invisibility of revolutions
5. Chapter 12 – The resolution of revolutions

Written assignment, discussion and debate:
1. Each team writes a summary of each reading in the form of three to five bullet points of key ideas (takeaways) and offers one question for discussion in class. Send the summaries to the classmates 24 hours in advance of the session.
2. Each team responsible for leading the discussion should provide a very brief highlight of the reading and discuss 3 to 4 of the questions from the students.

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 a 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

Written assignment and discussion:
1. Each team writes a summary of each reading in the form of three to five bullet points of key ideas (takeaways) and offers one question for discussion in class. Send the summaries to the classmates 24 hours in advance of the session.
2. Each team responsible for leading the discussion should provide a very brief highlight of the reading and discuss 3 to 4 of the questions from the students.

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, discussion and debate:
1. Each team writes a summary of each reading in the form of three to five bullet points of key ideas (takeaways) and offers one question for discussion in class. Send the summaries to the classmates 24 hours in advance of the session.
2. Each team responsible for leading the discussion should provide a very brief highlight of the reading and discuss 3 to 4 of the questions from the students.

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 a 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:


Written assignment and discussion:
1. Each team writes a summary for each of five (of the nine) readings in the form of three to five bullet points of key ideas (take-aways) and offers one question for discussion in class. Send the summaries to classmates 24 hours in advance of the session.

2. Prepare one or two questions for the faculty panel to respond to.

**Session 9: Responsible Research in Business and Management**

Readings:


3+. Four award winning papers from Management and Marketing from this webpage: www.rrbm.network/actions/awards.

Written assignment and discussion:
1. Each student writes a summary of each reading in the form of three to five bullet points of key ideas (take-aways) and offer one question for discussion in class. Send the summaries to the classmates 24 hours in advance of the session.

2. Answer these two questions for each of the award-winning papers:
   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?

**Session 10: Presentation and Conclusion**

Each student delivers a maximum 10-minute presentation of his/her research proposal. See the below for detailed instruction on this assignment.

The paper is due three weeks after the last session.

**Detailed Explanations on the Three Assignments**

**Assignment 1: Chapter or article summaries**

Each team will write a summary of one assigned article or chapter. The summary includes a) three to five most important ideas or concepts in the reading, and b) one question related to the ideas in the chapter or article that you would like the class to discuss.

Please send the summary to all the classmates 24 hours before the session when they will be discussed. Reading assignments to each team will be made at the end of the previous session.

The class discussion should focus on the questions after a very brief introduction to the key concepts. The team should prepare its answer to the questions and share with the class after the classmates have discussed it. Every class member should read the summary and be prepared to discuss the team’s question. Being prepared is extremely important for a good discussion and learning. We expect every student to have read all the readings, and be well prepared to discuss the core ideas.
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 a 5-minute closing statement to summarize their key arguments (taking into account the information emerged from the questioning period).

Assignment 3: A preliminary research proposal (individual)
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 list of award-winning papers in Management and in Marketing 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. (3) Third is 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.

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. Research design: Briefly description the population and region that your research is most relevant; the method of observation (data and measures), 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).
3. 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.
4. Principles of responsible research: Describe how you consider the seven principles of responsible research in your problem definition and research design. Tsui (2019)’s AMD Guidepost Essay may be a useful guide to develop your research proposal and design that will enhance your chance of producing credible findings and useful knowledge.
RRBM auditing students will be expected to follow the same grading and course requirements as the ASU course, as outlined below.

## Grading and course requirements

### Your course grade

Your final course grade will be an average of the grades you received on the four 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

You can and should reread the W. P. Carey MBA program and ASU policies and procedures on Academic Integrity and the MBA honor code found at [https://gradstudents.wpcarey.asu.edu/student-resources/policies](https://gradstudents.wpcarey.asu.edu/student-resources/policies). Is there anything about the application to this course and its assignments of those policies and procedures, and of the honor code, that is unclear to you? If so, it is your responsibility to ask me for clarification.

The expectations for this course are that you do your own original individual work on all the assignments. I encourage you to speak to other students in the course about the topics and issues, but do not share your work. You may not consult with students previously enrolled in this or similar courses at ASU or elsewhere or use their class notes or any other materials. 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 on Canvas, you are affirming that the contents are your original work.

We at ASU, at the W. P. Carey School of Business, and in this course, 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 as described in the ASU academic integrity policy linked above.

## Other policies and important notes

**Religious accommodations** will be made for students with religious holidays related to their sincerely held religious belief. See the policy at [http://www.asu.edu/aad/manuals/acd/acd304-04.html](http://www.asu.edu/aad/manuals/acd/acd304-04.html). See this link for the calendar of official religious holidays. [https://eoss.asu.edu/cora/holidays](https://eoss.asu.edu/cora/holidays).

**University sanctioned activities.** Accommodations will also be made for students participating in University sanctioned activities. See policy at: [http://www.asu.edu/aad/manuals/acd/acd304-02.html](http://www.asu.edu/aad/manuals/acd/acd304-02.html).

**ASU has tutoring support available**, including writing tutoring. See: [https://studentsuccess.asu.edu](https://studentsuccess.asu.edu).

**Special needs and disability accommodations:** The Disability Resource Center (DRC) provides information and services to students with any documented disability who are attending ASU’s campuses. Individualized program strategies and recommendations are available for each student as well as current information regarding community resources. Students also may have access to specialized equipment and supportive services and
should contact the instructor for accommodations that are necessary for course completion. For further information on this subject please refer to: https://eoss.asu.edu/drc.

**Threatening behavior policy:** Of course, we do not condone or tolerate threatening behavior. You can read more about this in the Student Services Manual under “Handling Disruptive, Threatening, or Violent Individuals on Campus” at http://www.asu.edu/aad/manuals/ssm/ssm104-02.html.

**Title IX** is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. Individuals who believe they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at https://sexualviolenceprevention.asu.edu/faqs.