

PHIL 412 / 510 – (Topics in) Philosophy of Science
‘Biological and Social Kinds’

Fall Term 2021

Tue, Thu 11:00–12:20, [Assiniboia Hall 2-02A](#)

Instructor: Ingo Brigandt
E-mail: brigandt@ualberta.ca
Phone: 780-492-9030
Office: 2-47 Assiniboia Hall and remote
Office hours: by appointment
Website at <https://eclass.srv.ualberta.ca/course/view.php?id=70191>

A. Course overview

In this seminar on biological and social kinds, we will take a look at different concrete kinds from the biological, biomedical, and social sciences. We will especially address kinds that include a mutual influence of biological and social factors, which one therefore could call ‘biosocial kinds’ or ‘human kinds,’ when they classify humans. Examples to be covered include sex/gender, race, and mental disorders. The general philosophical issues we will address are natural vs. nominal kinds, realism vs. social constructivism, essentialism about kinds, different types of kinds, how kinds and classification in the social sciences differ from the biological sciences, and whether a scientific account of something as a kind is dependent on human aims and values, such as explanatory / investigative aims, social-political aims, and normative values.

After an introduction on why traditional, essentialist accounts of kinds are inadequate, we begin with realism vs. social constructivism about kinds. For a general overview, we consider a taxonomy of different types of kinds (e.g., historical kinds, homeostatic property cluster kinds, and institutional kinds), and survey a few brief examples of kinds from chemistry to psychiatry. Then we will take a closer look at concrete cases, discussing controversies about their status as kinds and the distinctive considerations to be used when construing them as kinds. We will cover race, sex and gender, emotions (as an instance of cognitive kinds), and several psychiatric kinds (including the notion of interactive kinds). After a look at Indigenous biological classifications (and the relation to scientific taxonomy), we conclude by returning to general issues about social construction, the mind-dependence of kinds, and the role of human conventions and values.

B. Prerequisites

To take the class as an undergraduate (PHIL 412), you must have previously completed two philosophy classes (including one class at the 200-level or higher) or obtain my permission.

C. Required texts

The required readings consist of journal articles and book chapters, and are listed below in Section L. A substantial part of the readings can be accessed online via our course website.

D. Course requirements

- Oral presentation 15%
- Participation 10%
- Four brief responses 20%
- Shorter essay 20%
- Term paper outline 5%
- Term paper (final version) 30%

Oral presentation (15%): Every student has to give one oral presentation. Your task as a presenter is to briefly summarize this meeting's readings (highlighting points that you find particularly relevant) but primarily to start the discussion by having prepared some questions (e.g. about problematic issues in the readings). I ask you to prepare a short handout (including discussion questions) and email me a draft in advance so that I can provide comments. Contact me to sign up for a presentation on a particular class date (it is first come, first serve), where you find the schedule of presentations and still open slots on eClass.

Participation (10%): Attendance and active participation is important for this class. It is the responsibility of each student to come to class prepared to actively engage in discussion. Each of you will probably have picked up different points from the readings or have questions or objections, so please share them! You can also obtain participation credit by starting topics and replying to posts at the discussion forum on our eClass (including by briefly reporting on non-assigned literature from the folder with additional literature).

Four brief critical responses (5% each): You have to submit four brief critical responses, two by October 7, and two in October. A critical response is about 300 words in length, and should not just summarize the readings. Instead, it should identify an issue that was not fully clarified in the reading or raises further issues and/or your critical response to one point from the reading. A brief response has to be submitted by the beginning of the class where the reading is assigned, and if several readings are assigned for that date, the brief response can focus on one of them.

Shorter essay (20%): You have to write a shorter essay, which is due on Thursday, November 11 at noon. Feel free to consult with me about the topic you want to discuss before starting with the writing of the essay, and to send me a draft of your essay to receive comments.

Approximate length of the shorter essay paper: 1200–1600 words if you are an undergraduate student (registered in PHIL 415); 2000–2400 words if you are a graduate student (registered in PHIL 510).

Term paper (outline 5%, final version 30%): You have to write a term paper, the final version of which is due on Monday, December 20 at noon. An outline that at least lists the issues and the literature to be discussed (but may also be a full-length term paper draft), is due on Tuesday December 7 at 10am. I will assign a grade to this draft and provide comments relevant for you to write the final version. The term paper should critically discuss an issue from our class, ideally using some of the assigned readings or some of the additional literature that I make available, where of course you are free to find and discuss further relevant literature. You are encouraged to discuss term paper topics and ideas with me before starting with the writing of the term paper outline.

Approximate length of the final version of the term paper: 1600–2400 words if you are an undergraduate student (registered in PHIL 415); 2800–4000 words if you are a graduate student (registered in PHIL 510).

E. Course website

The course has a website at <https://eclass.srv.ualberta.ca>. Most of our assigned readings can be accessed from this site, and I use it to post presentation handouts and additional material. The site also contains a discussion board. Let me know if you audit the class (or upon login do not see PHIL 412 / 510 under 'My Courses'), so that I can add you to the list of online participants.

F. Schedule of classes

Sep 2	Introduction. Khalidi, <i>Natural Categories and Human Kinds</i> , Section 1.1
Sep 7	Traditional essentialism. Khalidi, <i>Natural Categories and Human Kinds</i> , Sections 1.3–1.7 (1.5 can be skipped)
Sep 9	Realism and social construction. Hacking, <i>The Social Construction of What</i> , Chapter 1, pp. 5–14, 16–29, and 31–34
Sep 14	Realism and social construction. Boyd, 'Kinds as the "workmanship of men": realism, constructivism and natural kinds,' Sections 0–3
Sep 16	HPC account of kinds. Brigandt, 'Natural kinds in evolution and systematics: metaphysical and epistemological considerations'
Sep 21	Various types and examples of kinds. Khalidi, <i>Natural Categories and Human Kinds</i> , Sections 4.1–4.5
Sep 23	Various types and examples of kinds. Khalidi, <i>Natural Categories and Human Kinds</i> , Sections 4.6–5.3
Sep 28	Various types and examples of kinds. Khalidi, <i>Natural Categories and Human Kinds</i> , Sections 5.4–5.7
Sep 30	National Day for Truth and Reconciliation (no classes)
Oct 5	Kinds and human values. Ludwig, 'Ontological choices and the value-free ideal'
Oct 7	Race as a kind. Mallon, 'Race': normative, not metaphysical or semantic' Last opportunity to submit brief response #2
Oct 12	Race as a kind. Kaplan, 'When socially determined categories make biological realities'
Oct 14	Sex and gender. Stone, 'Essentialism and anti-essentialism in feminist philosophy'
Oct 19	Sex and gender. Sveinsdóttir, 'The metaphysics of sex and gender' [optional: Ainsworth, 'Sex and gender redefined']
Oct 21	Emotion as a kind. Griffiths, 'Is emotion a natural kind?' and Section 4 of 'Emotions as natural and normative kinds'
Oct 26	Emotions as kinds. Barrett, 'Emotions are real'
Oct 28	Interactive kinds. Hacking, <i>The Social Construction of What</i> , Chapter 4 Last opportunity to submit brief response #4

Nov 2	Interactive kinds. Tekin, ‘The missing self in Hacking’s looping effects’
Nov 4	Psychiatric kinds. Godman, ‘Psychiatric disorders <i>qua</i> natural kinds: the case of the "apathetic children"’

Fall term reading week

Shorter essay due on Nov 11 at noon

Nov 16	Psychiatric kinds. Haslam, ‘Kinds of kinds: a conceptual taxonomy of psychiatric categories’
Nov 18	Psychiatric kinds. Charland, ‘Character: moral treatment and the personality disorders,’ pp. 64–73 Zachar and Potter, ‘Personality disorders: moral or medical kinds – or both?’ pp. 103–105, 108, and 111–115
Nov 23	Psychiatric kinds. Potter, ‘Oppositional defiant disorder: cultural factors that influence interpretations of defiant behavior and their social and scientific consequences’
Nov 25	Psychiatric kinds. Horwitz, ‘The social functions of natural kinds: the case of major depression’
Nov 30	Construction and human values again. Ludwig, ‘Indigenous and scientific kinds’
Dec 2	Construction and human values again. Khalidi, <i>Natural Categories and Human Kinds</i> , Sections 6.1 and 6.3–6.5
Dec 7	Construction and human values again. [optional: Brigandt, ‘How to philosophically tackle kinds without talking about "natural kinds",’ Sections 1–3 and 6] Term paper outline due at 10am

Dec 20 Term paper (final version) due at noon

G. Academic integrity and plagiarism

The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards and to uphold the policies of the university in this respect. Students are urged to familiarize themselves with the [Code of Student Behaviour](#) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the university.

The Code of Student Behaviour defines plagiarism as follows ([summary](#)):

No Student shall submit the words, ideas, images or data of another person as the Student’s own in any academic writing, essay, thesis, project, assignment, presentation or poster in a course or program of study.

Students should consult the information provided by the [Office of the Dean of Students](#) regarding avoiding cheating and plagiarism in particular and academic dishonesty in general. If in doubt about what is permitted in this class, ask the instructor. An instructor or coordinator who is

convinced that a student has handed in work that he or she could not possibly reproduce without outside assistance is obliged, out of consideration of fairness to other students, to report the case to the Associate Dean of the Faculty (see the [Academic Discipline Process](#)).

The library also has [information on avoiding plagiarism](#).

H. Sexual Violence Policy

It is the policy of the University of Alberta that sexual violence committed by any member of the University community is prohibited and constitutes misconduct. Resources and more information can be found at <https://www.ualberta.ca/campus-life/sexual-violence>.

I. Student Services

The university provides various services, including [Student Accessibility Resources](#) (exam and classroom accommodations for students with a disability, chronic health condition, or anxiety disorders), the [Academic Success Centre](#) (e.g., note-taking and writing skills), the [Centre for Writers](#) (writing support, in the basement of Assiniboia Hall), [Health and Wellness Support](#) (including [Counselling & Clinical Services](#) and the [Sexual Assault Centre](#)), and the [Office of the Student Ombuds](#) (advice and support to students facing academic, discipline, interpersonal and financial difficulties).

J. Attendance, Absences, and Missed Grade Components

Regular attendance is essential for optimal performance in any course. In cases of potentially excusable absences due to illness or domestic affliction, notify your instructor by e-mail within two days. Regarding absences that may be excusable and procedures for addressing course components missed as a result, consult the “[Attendance](#)” and “[Examinations](#)” sections of the Academic Regulations of the University Calendar. Be aware that unexcused absences will result in partial or total loss of the grade for the “attendance and participation” component(s) of a course, as well as for any assignments that are not handed-in or completed as a result.

K. Recording of lectures

Audio or video recording of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Recorded material is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the instructor.

L. Bibliography of readings

- Ainsworth, Claire. 2015. "Sex Redefined. The Idea of Two Sexes Is Simplistic. Biologists Now Think There Is a Wider Spectrum Than That." *Nature* 518:288-291.
- Barrett, Lisa Feldman. 2012. "Emotions Are Real." *Emotion* 12:413-429.
- Boyd, Richard. 1999. "Kinds as the “Workmanship of Men”: Realism, Constructivism, and Natural Kinds." In *Rationality, Realism, Revision: Proceedings of the 3rd International*

- Congress of the Society for Analytic Philosophy*, ed. J. Nida-Rümelin, 52-89. Berlin: de Gruyter.
- Brigandt, Ingo. 2009. "Natural Kinds in Evolution and Systematics: Metaphysical and Epistemological Considerations." *Acta Biotheoretica* 57:77-97.
- . 2020. "How to philosophically tackle kinds without talking about 'natural kinds'." *Canadian Journal of Philosophy*. <https://doi.org/10.1017/can.2020.29>
- Charland, Louis C. 2004. "Character: Moral Treatment and the Personality Disorders." In *The Philosophy of Psychiatry: A Companion*, ed. Jennifer Radden, 64-77. Oxford: Oxford University Press.
- Godman, Marion. 2013. "Psychiatric Disorders *qua* Natural Kinds: The Case of the "Apathetic Children"." *Biological Theory* 7:144-152.
- Griffiths, Paul E. 2004a. "Emotions as Natural and Normative Kinds." *Philosophy of Science* 71:901-911.
- . 2004b. "Is Emotion a Natural Kind?" In *Thinking About Feeling: Contemporary Philosophers on Emotions*, ed. Robert C. Solomon, 233-249. Oxford: Oxford University Press.
- Hacking, Ian. 1999. *The Social Construction of What*. Cambridge, MA: Harvard University Press.
- Haslam, Nick. 2003. "Kinds of Kinds: A Conceptual Taxonomy of Psychiatric Categories." *Philosophy, Psychiatry, & Psychology* 9:203-217.
- Horwitz, Allan V. 2014. "The Social Functions of Natural Kinds: The Case of Major Depression." In *Classifying Psychopathology: Mental Kinds and Natural Kinds*, ed. Harold Kincaid and Jacqueline A. Sullivan, 209-226. Cambridge, MA: MIT Press.
- Kaplan, Jonathan M. 2010. "When Socially Determined Categories Make Biological Realities." *The Monist* 93:283-299.
- Khalidi, Muhammed Ali. 2013. *Natural Categories and Human Kinds: Classification in the Natural and Social Sciences*. Cambridge: Cambridge University Press.
- Ludwig, David. 2016. "Ontological Choices and the Value-Free Ideal." *Erkenntnis* 81:1253-1272.
- . 2017. "Indigenous and Scientific Kinds." *British Journal for the Philosophy of Science* 68:187-212.
- Mallon, Ron. 2006. "'Race': Normative, Not Metaphysical or Semantic." *Ethics* 116:525-551.
- Potter, Nancy Nyquist. 2014. "Oppositional Defiant Disorder: Cultural Factors That Influence Interpretations of Defiant Behavior and Their Social and Scientific Consequences." In *Classifying Psychopathology: Mental Kinds and Natural Kinds*, ed. Harold Kincaid and Jacqueline A. Sullivan, 175-193. Cambridge, MA: MIT Press.
- Stone, Alison. 2004. "Essentialism and Anti-Essentialism in Feminist Philosophy." *Journal of Moral Philosophy* 1:135-153.
- Sveinsdóttir, Ásta Kristjana. 2011. "The Metaphysics of Sex and Gender." In *Feminist Metaphysics: Explorations in the Ontology of Sex, Gender and the Self*, ed. Charlotte Witt, 47-65. Dordrecht: Springer.
- Tekin, Şerife. 2014. "The Missing Self in Hacking's Looping Effects." In *Classifying Psychopathology: Mental Kinds and Natural Kinds*, ed. Harold Kincaid and Jacqueline A. Sullivan, 227-256. Cambridge, MA: MIT Press.
- Zachar, Peter, and Nancy Nyquist Potter. 2010. "Personality Disorders: Moral or Medical Kinds—or Both?" *Philosophy, Psychiatry, & Psychology* 17:101-117.

Policy about course outlines can be found in [Course Requirements](#), [Evaluation Procedures and Grading](#) of the University Calendar.