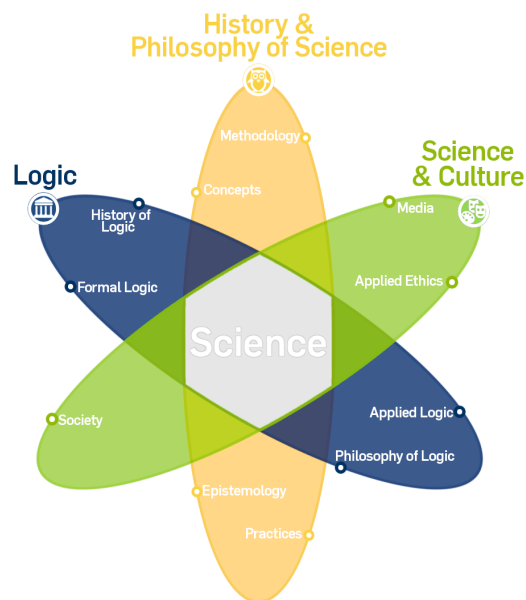


Annotated course catalogue

History, Philosophy and Culture of Science (HPS+)



Winter Term 2024/2025

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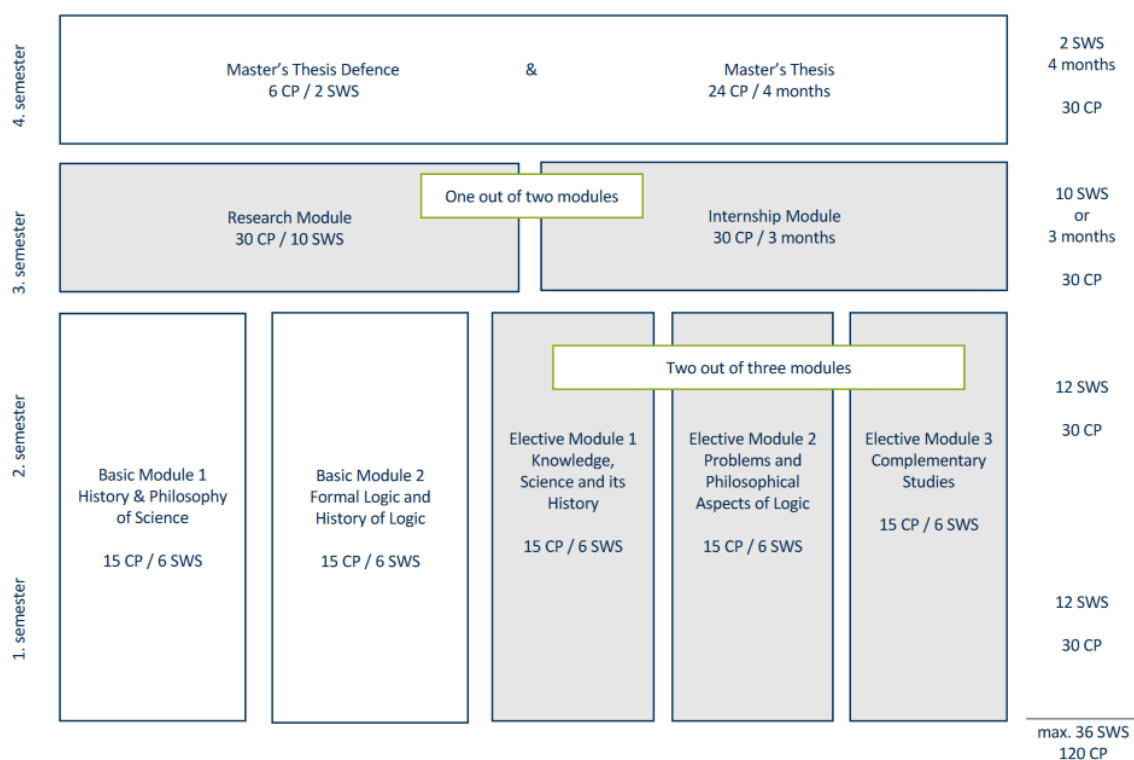
Information on registration in RUB eCampus

To register for the courses in this course catalogue, search for the course in **eCampus** using the course number (**Lehrveranstaltungsnummer**) and register.

You can access eCampus via the WebClient:

https://www.ruhr-uni-bochum.de/ecampus/ecampus-webclient/login_studierende.html

Curriculum



This study plan gives you an initial overview. You will find a detailed description of the individual modules in the module handbook. Therefore, only a **brief description** is given here:

In the first two semesters, you will study the basic modules 1 and 2 as well as two of the three compulsory elective modules. Basic module 1 (History & Philosophy of Science) is always offered in the summer semester and basic module 2 (Formal Logic and History of Logic) in the winter semester. Depending on when you start your studies, you will therefore complete basic module 1 or 2 first. The courses from the three compulsory elective modules are offered every semester.

In the third semester, you will study **either** the internship module **or** the research module. The internship module gives you the opportunity to complete a three-month internship, about which you will write an internship report. In the research module, on the other hand, you work on your own research-related question in one of the three subject areas of the compulsory elective modules, which also serves as preparation for the Master's thesis. You can complete the research module at the Ruhr University or in the form of a semester abroad, preferably at one of the universities with which we have cooperation agreements. The same naturally applies to the practical module: The internship can be completed in Bochum, elsewhere in Germany or abroad. In both modules, the focus is on your own commitment, but we will also support you in the realisation (finding internships, formulating questions, finding topics, etc.). If you already know that after your Master's degree you would like to pursue a career outside of academia in the narrow sense, but with a scientific connection (e.g., science foundations, museums, education and science ministries, science journalism, university administrations, to name just a few examples), then the internship module is ideal for this. If, on the other hand, you are 'drawn' to science itself and you already know, for example, that you would like to do a doctorate, then the research module offers you the ideal conditions to start honing your 'scientific profile' during your studies.

Finally, in the fourth semester, you will write your Master's thesis in the final module and present it in a specially designed colloquium.

— Overview —

Basic module 1: *History and Philosophy of Science*

— Will be offered again in the summer term 2025 —

Basic module 2: *Formal Logic and History of Logic*

030095	Formal Logic			
	Lecture	Mo 14-16	GABF 04/609	Skurt
030096	Formal Logic			
	Exercise	Mo 16-18	GABF 04/609	Skurt
030101	Frege's Philosophy of Language and Logic			
	Blockseminar	03.03.-06.03.25 09-18	GABF 04/358	Rami

Elective Module 1: *Knowledge, Science and its History*

030088	Philosophy of Plants			
	Blockseminar	29.10.24 16-18; 03.-06.25 10-16	GABF 04/352	Baedke, Straetmanns
030056	Seminar in Philosophy of Science – Progress in Science			
	Seminar	Tue 12-14	GABF 04/609	Yoo
030099	Bayesian Epistemology: Theory, Challenges, and Applications			
	Seminar	Tue 14-16	GABF 04/609	Wang
030105	Exercises: Bayesian Epistemology: Theory, Challenges, and Applications			
	Seminar	Tue 16-18	GABF 04/609	Wang
030116	Kant: Prolegomena zu einer jeden künftigen Metaphysik, die als Wissenschaft wird auftreten können			
	Seminar	Thu 10-12	GAFO 06/619	Vernazzani
030104	Kant: Kritik der reinen Vernunft			
	Seminar	Mo 12-14	GABF 04/716	Dung
030113	Philosophical Methods: An Introduction			
	Seminar	Thu 10:30-12	GAFO 04/619	Horvath
030134	Lecture Series <i>History and Philosophy of the Life Sciences</i>			

	Kolloquium	Mo 16-18	online	Baedke
030121	Kolloquium zur Wissenschaftstheorie und Wissenschaftsgeschichte			
	Kolloquium	Thu 18-20	GA 3/143	Baedke, Pulte
030050	Introduction to the Philosophy of Science			
	Seminar	Thu 16-18	GABF 04/514	Boem
030072	Topics in Philosophy of the Life Sciences			
	Seminar	Wed 10-12	GA 3/143	Boem
040169	Die Geschichte der Atomkraft: Hoffnungen, Realitäten, Bomben			
	Seminar	Mon 10-12	GA 04/149	Uekötter

Elective Module 2: *Problems and Philosophical Aspects of Logic*

030094	Gödel: The Unprovability of the Consistency of Arithmetic			
	Seminar	Wed 14-16	GABF 04/356	Kürbis
030091	Research seminar on contradictory logics			
	Seminar	Tue 14-16	GABF 04/354	Wansing
030115	Capita Selecta in logic and the foundations of mathematics			
	Blockseminar	Feb 2025	TBA	Sanders
030007	Main Topics in Metaphysics			
	Lecture	Thu 10-12	ND 03/99	Rami
030102	Topics in Philosophy of Language, Logic and Information			
	Colloquium	Wed 16-18	GA 04/187	Liefke, Rami
030124	Research Colloquium <i>Logic and Epistemology</i>			
	Colloquium	Thu 14-16	GABF 04/354	Kürbis, Skurt

Elective Module 3: Complementary Studies

030073	Argumentation			
	Blockseminar	05.-09.02.25 10-16	Wasserstraße 221/4	Seselja, Straßer

030128	EXTRA Research Colloquium <i>Metaphilosophy, Experimental Philosophy and Argumentation Theory</i>	Colloquium	Wed 16:30-18	GAFO 04/619	Horvath
030074	Agent-based simulations in philosophy: theoretical part	Seminar	Fri 14-16	Wasserstraße 221/4	Seselja, Straßer
030076	Agent-based simulations in philosophy: practical part	Seminar	Fri 16-18	Wasserstraße 221/4	Michelini
030093	Explainable Artificial Intelligence	Seminar	Wed 14-16	GABF 04/354	Wiese
211122	Perlen der theoretischen Informatik	Seminar	Tue 14-16	MC 01/54	Zeume
030132	Technikphilosophisches Forschungskolloquium	Colloquium	Tue 16-18	GABF 04/352	Weydner-Volkmann
030005	Introduction into Cognitive Science	Lecture	Tue 12-14	HGA 20	Newen, Rose
030131	Philosophy Meets Cognitive Science: Memory and Language	Colloquium	Tue 12-14	GA 04/187	Werning
030114	“I, Me, and Mine”: The Self from Kant to Freud, Wittgenstein, and Sartre	Seminar	Wed 10-12	GABF 04/714	Vernazzani
030077	Science in a Political World	Seminar	Fri 12-14	Wasserstraße 221/4	Seselja, Straßer
030075	Fact-checking of Scientific Claims: a Philosophy of Science Perspective	Blockseminar	09.11.24; 07.12.24; 25.01.25 10-16 (+ online tutoring in between)	TBA	Seselja
030004	Lecture Series <i>Ethics for Economics, Law, and Politics</i>	Lecture	Wed 18-20	GA 03/149	Steigleder
040169	Die Geschichte der Atomkraft: Hoffnungen, Realitäten, Bomben	Seminar	Mon 10-12	GA 04/149	Uekötter
030117	Ethics of Infectious Diseases				

	Seminar	Tue 16-18	GABF 04/511	Steigleder
060012	Normative Legal Philosophy			
	Seminar	Tue 08-10	HZO 90	Magen
030110	Philosophy and Norm Psychology			
	Seminar	Tue 12-14	GABF 0/514	Berio
030086	New Perspectives on Kant's Practical Philosophy + Workshop			
	Seminar	Thu 16-18	GA 03/46	Mieth
210032	Introduction to Methods in the Study of Religion			
	Seminar	Wed 14-16	Uni90a, 0/013	Elwert, Freudenberg, Rezania

— Annotation¹ —

¹ At the time this course catalog was created, comments were not available for all courses. You can access the course catalogue at <https://vz.ruhr-uni-bochum.de/> and then search for the relevant course using the course number (make sure you have the correct semester at the top left!) and then use the “Veranstaltungsdetails” (“Course details”) tab to see if there is a comment now.

Basic module 2: Formal Logic and History of Logic

030095	Formal Logic			
	Lecture	Mo 14-16	GABF 04/609	Skurt

This lecture offers a thorough treatment of first-order classical and intuitionistic logic, including proofs of soundness, completeness, and other fundamental model- and proof theoretic properties, such as the disjunction and existence property in the intuitionistic case. In addition, the course gives an overview of basic non-classical logics, such as first-degree entailment logic.

CP can be earned by a graded exam.

030096	Formal Logic			
	Exercise	Mo 16-18	GABF 04/609	Skurt

The exercises accompanying the lecture Formal Logic contribute to the participants' confidence in the application of methods, techniques, and procedures of formal logic.

CP can be earned by active participation and regular handed in exercise sheets.

030101	Frege's Philosophy of Language and Logic			
	Blockseminar	03.-06.25 09-18	GABF 04/358	Dolf

Gottlob Frege (1848-1925) is one of founding fathers of analytic philosophy. His philosophical views still have a big influence on current debates in analytic philosophy. There is an ongoing debate about the correct interpretation of his views and on the influence of German 19th century philosophy on Frege's thoughts. On the occasion of Frege's 100th death anniversary, this seminar aims to focus on different aspects of philosophy of logic and language. For this purpose, we will invite six different international Frege scholars that will give talks, and we will have the opportunity to discuss their views with them in detail.

***Elective Module 1: Knowledge, Science and its
History***

030088	Philosophy of Plants			
	Blockseminar	29.10.24 16:00; 03.-06.25	GABF 04/352	Baedke, Straetmanns

The philosophy of biology was and still is characterized by a bias towards the animal kingdom. Concepts like teleology or agency, individuality, and behavior have often been shaped and philosophically examined with a focus on multicellular animals. However, in recent years, there has been a noticeable shift in science and society at large towards a more serious consideration of plants and their unique characteristics. This “vegetal turn” is propelled by an increasing number of scholars, who no longer view plants as passive and inert objects but as active, communicative, and agential subjects that shape their surroundings and engage in various environmental relationships. This shift is accompanied by debates on concepts like plant intelligence, as well as on the advantages and dangers of anthropomorphizing plants. Simultaneously, in this vegetal turn, plants take center stage in the face of global environmental challenges like climate change or environmental pollution.

The first part of the seminar will focus on the history of the philosophy of plants, which can be traced back as far back as Aristotle and Theophrastus. We will then examine how different biological concepts – like teleology, organization, individuality, sexuality, cognition – play out in the plant world, what theoretical and methodological problems they trigger and how scholars have dealt with them. Lastly, we will look at other aspects of the philosophy of plants, like plant ethics and the emerging field of critical plant studies.

In the seminar, publications covering the history of philosophy and current debates in philosophy of science will be read and discussed. To pass the course, students must participate in the preliminary meeting, actively partake in the discussions, and conduct a presentation (or take other course activities). No particular knowledge in biology is required. Depending on the participants the seminar can be held in English and/or German.

Literature:

Baldassarri, F., & Blank, A. (Eds.). (2021). *Vegetative Powers: The Roots of Life in Ancient, Medieval and Early Modern Natural Philosophy* (Vol. 234). Springer International Publishing.

Hall, M. (2011). *Plants as persons a philosophical botany*. SUNY Press.

Hiernaux, Q. (2023). *From Plant Behavior to Plant Intelligence?* Éditions Quae.

Kallhoff, A., Di Paola, M., & Schörghener, M. (Eds.). (2018). *Plant ethics:*

Concepts and applications. Routledge.

Sandford, S. (2023). *Vegetal Sex. Philosophy of Plants*. Bloomsbury Academic.

030056	Seminar in Philosophy of Science – Progress in Science			
	Seminar	Tue 12-14	GABF 04/609	Yoo

What is scientific progress? One could see it as stacking bits of knowledge through research and other investigative activities in science. As time flows, there is progress in science since we accumulate more and more knowledge. This view has been widely held throughout history, and it is commonly endorsed even nowadays. But at least to philosophers, this accumulation viewpoint on progress in science has come under critical scrutiny since Kuhn, Lakatos and others proposed different conceptions of scientific progress. This seminar aims to investigate these diverse accounts of the progress of scientific knowledge. We start with a general introduction to some philosophical theories by Kuhn, Popper, and Lakatos. Then, we narrow our focus on scientific progress by reviewing some chapters from a classic on this topic, "Progress and Its Problems" by Larry Laudan. We finalize this seminar with some recent discussions, such as those from Alexander Bird. This seminar is designed for students at the introductory level, whether they are in the early stages of studying philosophy or studying other majors. Thus, students do not require preliminary knowledge or previous participation in relevant courses. Credits and evaluation are based on submitting weekly hand-written scribbles and one final essay, depending on the students' needs.

Reference on Introductory Philosophy of Science (Secondary Textbooks):

Dienes, Zoltan (2008) *Understanding Psychology as a Science: An Introduction to Scientific and Statistical Inference*, Red Globe Press.

Godfrey-Smith, Peter. *Theory and reality: An introduction to the philosophy of science*. University of Chicago Press, 2009.

Johansson, L.G. (2016). *Philosophy of Science for Scientists*. Springer International Publishing.

Rosenberg, A., & McIntyre, L. (2019). *Philosophy of Science: A Contemporary Introduction*. Routledge.

Staley, Kent W. (2014). *An Introduction to the Philosophy of Science*. Cambridge University Press.

Reference on Scientific Progress:

Azoulay, P., Fons-Rosen, C., & Zivin, J. S. G. (2019). Does Science Advance One Funeral at a Time? *American Economic Review*, 109(8), 2889–2920.

- Baliotti, S., Mäs, M., & Helbing, D. (2015). On Disciplinary Fragmentation and Scientific Progress. *PLOS ONE*, 10(3), e0118747.
- Bird, A. (2007). What is scientific progress? *Nous*, 41(1), 64–89.
- de Langhe, R. (2014). A comparison of two models of scientific progress. *Studies in History and Philosophy of Science Part A*, 46, 94–99.
- Grim, P., Kavner, J., Shatkin, L., & Manjari, T. (2021). Philosophy of Science, Network Theory and Conceptual Change: Paradigm Shifts as Information Cascades. In Euel Elliott & L. Douglas Kiel (Eds.), *Complex Systems in the Social and Behavioral Sciences: Theory, Method and Application*.
- Hoyningen-Huene, P. (2013). *Systematicity: The Nature of Science*. OUP USA.
- Martini, C., & Pinto, M. F. (2017). Modeling the social organization of science: Chasing complexity through simulations. *European Journal for Philosophy of Science*, 7(2), 221–238.
- Nickles, T. (2008). Disruptive Scientific Change. In *Rethinking Scientific Change and Theory Comparison* (pp. 351–379). Springer Netherlands.
- Park, M., Leahey, E., & Funk, R. J. (2023). Papers and patents are becoming less disruptive over time. *Nature*, 613(7942), 138–144.
- Rowbottom, D. P. (2023). *Scientific Progress*. Cambridge University Press.
- Shan, Y. (2022). *New Philosophical Perspectives on Scientific Progress*. Routledge.
- Stegenga, J. (2023). Justifying Scientific Progress. *Philosophy of Science*, 1–18.

030099	Bayesian Epistemology: Theory, Challenges, and Applications
Seminar	Tue 14-16 GABF 04/609 Wang

This course introduces selected topics in Bayesian epistemology. Bayesian epistemology provides formal models of credence and discusses how to rationally form, organize, and update credences in light of evidence. To offer a partial overview of this fast-growing research field, our course encompasses foundational, challenging, and practical problems. The first part of the course addresses various synchronic and diachronic rationality norms for credence, such as probabilism, the principle of indifference, and principles of deference. The second part deals with some of the most discussed challenges, such as the sleeping beauty problem, the old evidence problem, uncertain learning, and modelling the weights of evidence. The final part explores how Bayesian epistemology can be applied to everyday and scientific reasoning, including inductive (confirmation), abductive (inference to the best explanation), and causal reasoning (causal Bayesian networks). A basic knowledge of first-order logic is presupposed, and familiarity with probability calculus and set-theoretical reasoning is welcome. The course is accompanied by an exercise unit where weekly exercises are discussed.

Literature:

Arlo-Costa, H. et al. (Eds.), Readings in Formal Epistemology Source Book, 2016, Springer.

Titelbaum, M., Fundamentals of Bayesian Epistemology I, II, 2022, OUP.

Sprenger, J. and S. Hartmann, Bayesian Philosophy of Science, 2019, Oxford.

030105	Exercises: Bayesian Epistemology: Theory, Challenges, and Applications			
	Seminar	Tue 16-18	GABF 04/609	Wang

This is the exercise session for the course “Bayesian Epistemology: Theory, Challenges, and Applications.”

030116	Kant: Prolegomena zu einer jeden künftigen Metaphysik, die als Wissenschaft wird auftreten können			
	Seminar	Thu 10-12	GAFO 06/619	Vernazzani

Kants Prolegomena zu einer jeden künftigen Metaphysik, die als Wissenschaft wird auftreten können (1783) stellt eine übersichtliche und kürzere Darstellung der Hauptergebnisse der Kritik der reinen Vernunft, welche 1781/1787 veröffentlicht wurde, dar. In den Prolegomena nimmt Kant die drei transzendentalen Hauptfragen auf, nämlich: Wie ist reine Mathematik möglich? Wie ist reine Naturwissenschaft möglich? und Wie ist die Metaphysik möglich? Kants ausgesprochener Zweck war, seine Stellungnahme bzgl. der drei Fragen mit Hinblick auf die Rezeption seines Werks zu verdeutlichen und einfach darzustellen.

Das Seminar eignet sich sowohl als Einführung in die kantische Philosophie für Anfänger, die keine Vorkenntnis von Kants theoretischer Philosophie besitzen, als auch als Vertiefungstext für Teilnehmer*Innen, die sich bereits gut mit den Haupttexten von Kant auskennen.

Literature:

Als Einführungstext empfehle ich:

Michael Rohlf (2023) „Immanuel Kant“ in E.N. Zalta & U. Nodelman (Hersg.) Stanford Encyclopedia of Philosophy.
<https://plato.stanford.edu/archives/fall2023/entries/kant/>.

Wir werden die Felix-Meiner Verlag Auflage der Prolegomena lesen. Anschaffung empfohlen.

030104	Kant: Kritik der reinen Vernunft			
	Seminar	Mo 12-14	GABF 04/716	Dung

Immanuel Kants Kritik der reinen Vernunft (KrV) ist sein erkenntnistheoretisches Hauptwerk, welches als eines der einflussreichsten Werke der Philosophiegeschichte gilt. Dort liefert er den Grundriss für seine Transzendentalphilosophie. In diesem Seminar werden wir – auf Grundlage einer gründlichen Lektüre des Kantischen Texts sowie unter Einbeziehung von moderner Sekundärliteratur – den Anfangsteil der KrV, bis einschließlich der transzendentalen Ästhetik, erarbeiten. Zentrale Themen sind:
Raum und Zeit

- Die beobachterunabhängige Wirklichkeit
- Wahrnehmung und Denken
- Die Unterscheidung zwischen begrifflichen und Erfahrungsurteilen

Literature:

Immanuel Kant. *Kritik der reinen Vernunft*. Reclam.

Weitere Texte werden über Moodle bereitgestellt. Da wir englischsprachige Sekundärliteratur hinzuziehen werden, ist die Fähigkeit und Bereitschaft, englische Fachliteratur lesen zu können, Voraussetzung.

030113	Philosophical Methods: An Introduction			
	Seminar	Thu 10:30-12	GAFO 04/619	Horvath

In this introductory seminar, we will discuss both general questions about methods, such as “What are methods in the first place?” or “How should methods be evaluated?”, and specific questions about philosophical methods, like “Are there any philosophical methods at all?”, “Are there uniquely or distinctively philosophical methods?”, or “What are the main philosophical methods?”. In light of this general background, we will also consider some philosophical methods in more detail, such as argumentation, conceptual analysis, experimental philosophy, formal methods, or thought experiments. The course will be based on a manuscript version of the introductory volume *Methods in Analytic Philosophy: A Primer and Guide* (edited by Joachim Horvath, Steffen Koch, and Michael G. Titelbaum), which is forthcoming as an open access book with the PhilPapers Foundation. There will be a lot of flexibility for the participants of the seminar to decide which philosophical methods they want to focus on, including decisions about selected further readings on these methods. Apart from the ability to read philosophical texts in English, some prior experience with doing philosophy would be helpful for a seminar that has the aim of reflecting on methods as a key aspect of philosophical practice.

030134	Lecture Series <i>History and Philosophy of the Life Sciences</i>			
	Kolloquium	Mo 16-18	online	Baedke

In this lecture series current topics in the history and philosophy of the life sciences will be discussed. The lecture series will host talks by international leading experts and local researchers, including philosophers and historians, but also scholars from the social and natural sciences. Participants will also have the opportunity to present their master and doctoral theses. Once per month (3-4 times during the whole term) the participants meet for a reading group meeting (instead of a lecture series talk) in which current research literature is discussed. For students (especially, but not only students of the HPS+Logic program) who want to participate and receive course credits, please write to jan.baedke@rub.de and register via eCampus. Talks will be given in English and online (via Zoom). They will be announced on: <https://rotorub.wordpress.com/roto-lecture-series/>

030121 Kolloquium zur Wissenschaftstheorie und Wissenschaftsgeschichte

Kolloquium Thu 18-20 GA 3/143 Baedke. Pulte

Das Kolloquium gibt Gelegenheit zur Diskussion wissenschaftstheoretischer und -historischer Themen unterschiedlicher Ausrichtung – insbesondere auch solcher, die im Zusammenhang mit Master- und Examensarbeiten sowie Promotionen stehen –, wie auch zur Vorstellung aktueller Literatur aus den genannten und umliegenden Bereichen. Zu verschiedenen Terminen sind Gastvorträge vorgesehen; Vortragssprachen sind Englisch und Deutsch. Interessierte aller Fachrichtungen sind herzlich zur Teilnahme eingeladen. Eine Kreditierung des Kolloquiums ist möglich; wenn diese angestrebt wird, ist eine Anmeldung im Campus-System vorzunehmen. Der Termin der ersten Sitzung/des ersten Vortrags wird per Mail bekanntgegeben. Das Kolloquium soll nach Möglichkeit überwiegend in Präsenz durchgeführt werden. Es kann jedoch sein, dass für einzelne Veranstaltungen ein Hybridformat angeboten wird.

030050 Introduction to the Philosophy of Science

Seminar Thu 16-18 GABF 04/514 Boem

This course provides an introduction to the philosophy of science, exploring key concepts, theories, and debates that have shaped the field. Students will engage with topics such as the definition of science in its historical context, the nature of scientific explanation, scientific reasoning: deduction, induction, inference to best explanation, probability, the structure of scientific theories, the role of observation and experimentation, and the ethical implications of scientific practices. Through readings, lectures, and discussions, students will develop a deeper understanding of how science works, its limits, and its impact on society.

In the seminar, publications covering these topics will be read and discussed. To pass the course, students must participate in the first meeting, actively partake in the discussions, and conduct a presentation (or take other course activities). No particular knowledge in science is required. The seminar will be held in English.

Literature:

Okasha, Samir, *Philosophy of Science: A Very Short Introduction*, Oxford, 2016.

Frigg, Roman and Stephan Hartmann, "Models in Science", *The Stanford Encyclopedia of Philosophy* (Fall 2024 Edition), Edward N. Zalta & Uri Nodelman (eds.), <https://plato.stanford.edu/archives/fall2024/entries/models-science/>

Hansson, Sven Ove, "Science and Pseudo-Science", *The Stanford Encyclopedia of Philosophy* (Fall 2021 Edition), Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/fall2021/entries/pseudo-science/>

Woodward, James and Lauren Ross, "Scientific Explanation", *The Stanford Encyclopedia of Philosophy* (Summer 2021 Edition), Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/sum2021/entries/scientific-explanation/>

030072 Topics in Philosophy of the Life Sciences

Seminar	Wed 10-12	TBA	Boem, Baedke
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The development of specific philosophies of science, i.e. looking at the practices and theories of individual disciplines, is now well established. The life sciences today constitute a lively scientific field with epistemological, but also social and ethical relevance, which is in need of philosophical analysis. The course will deal with some fundamental concepts of the life sciences and biomedicine such as 'gene', 'experiment', 'organism', 'race', and 'mechanism'. Topics such as the role of molecular genetic processes in the explanation of biological phenomena, the relationship between experiments and (big) data, the question of biological individuality and organisms' boundaries, the ethical dimension of certain practices and discoveries in the life sciences, and the role of medicine in public contexts, both social and political, will be analyzed and discussed.

No particular knowledge in biology is required (although it could be useful). However, a general knowledge about main themes in philosophy of science is necessary. The seminar will be held in English.

Literature:

Dupré, John, and Maureen A. O'Malley. 2009. 'Varieties of Living Things: Life at the Intersection of Lineage and Metabolism'. *Philosophy and Theory in Biology* 1 (20170609)

James, Michael and Adam Burgos, "Race", *The Stanford Encyclopedia of Philosophy* (Spring 2024 Edition), Edward N. Zalta & Uri Nodelman (eds.), <https://plato.stanford.edu/archives/spr2024/entries/race/>

Odenbaugh, Jay and Paul Griffiths, "Philosophy of Biology", *The Stanford Encyclopedia of Philosophy* (Summer 2022 Edition), Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/sum2022/entries/biology-philosophy/>

Pradeu, Thomas. 2016. 'The Many Faces of Biological Individuality'. *Biology & Philosophy* 31 (6): 761–73.

Reiss, Julian and Rachel A. Ankeny, "Philosophy of Medicine", *The Stanford Encyclopedia of Philosophy* (Spring 2022 Edition), Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/spr2022/entries/medicine/>

040169	Die Geschichte der Atomkraft: Hoffnungen, Realitäten, Bomben			
	Seminar	Mon 10-12	GA 04/149	Uekötter

Atomkraft ist wieder schick: Eine Mehrheit der Bundesbürger war gegen die Abschaltung der letzten deutschen Kernkraftwerke im April 2023. Es ist die jüngste Wendung in einer Geschichte, die seit dem Zweiten Weltkrieg Politik und Wirtschaft, Gesellschaft und Rüstung nachhaltig geprägt hat. Das Hauptseminar diskutiert die Entwicklung mit einem Schwerpunkt auf Deutschland und spannt den Bogen von den Hoffnungen und Ängsten der Adenauerzeit über den Bauboom in den siebziger Jahren und dem Aufstieg einer zivilgesellschaftlichen Bewegung. Dabei thematisiert die Veranstaltung auch die Atomgeschichte seit den achtziger Jahren, die bislang von der historischen Forschung erst bruchstückhaft behandelt worden ist. Das Ende der nuklearen Stromerzeugung in Deutschland ist auch eine Chance für eine Atomgeschichte, in der die Frage nach Pro und Contra nicht mehr überwältigend ist auch wenn die Nachzerfallswärme vergangener Konflikte weiterhin zu spüren ist.

Elective Module 2: Problems and Philosophical Aspects of Logic

030094	Gödel: The Unprovability of the Consistency of Arithmetic
Seminar	Wed 14-16 GABF 04/356 Kürbis

Gödel's first incompleteness theorem proved that if arithmetic is (ω) consistent, then it is not negation complete, that is, there is a sentence such that neither it nor its negation is provable in arithmetic. Gödel established this result by exhibiting a sentence of arithmetic, the so-called Gödel sentence, that is equivalent to the statement of its own unprovability in arithmetic. The second incompleteness theorem showed that if arithmetic is consistent, then it cannot prove the statement that expresses the consistency of arithmetic.

This course is an introduction to all formal aspects of Gödel's incompleteness theorems. We will begin with a recapitulation of fundamental results about first order logic, such as its completeness and the Löwenheim Skolem Theorem, and proceed to first order theories, in particular a fragment of number theory. Gödel's method of the arithmetisation of syntax and its application to the formalisation of proofs in arithmetic will be presented in detail. We will then be ready to prove Gödel's first incompleteness theorem. Afterwards we will consider the resources needed to prove the second incompleteness theorem. There will also be time to discuss the philosophical importance of Gödel's results.

Literature:

George Boolos: *The Logic of Provability* (Cambridge University Press 1993)

Herbert B. Enderton: *A Mathematical Introduction to Logic*, 2nd edition (San Diego: Harcourt 2001)

Eliot Mendelson: *An Introduction to Mathematical Logic*, 6th edition (Boca Raton: CRC Press 2015)

030091	Research seminar on contradictory logics
Seminar	Tue 14-16 GABF 04/354 Wansing

This seminar is related to the ERC-Advanced Grant project ConLog, *Contradictory Logics: A Radical Challenge to Logical Orthodoxy*, and contributes to the idea of research-based learning. The seminar is open to M.A. students with an interest in philosophical logic, the philosophy of logic, and the philosophies of language and of science.

In the 20th century, many systems of non-classical logic have been developed, including inconsistency-tolerant logics, which are typically all subsystems of classical logic. There are, however, logical systems that are radically different from classical logic insofar as they are non-trivial but contradictory. These logics are in glaring conflict with logical orthodoxy since Aristotle, who called the Principle of Non-Contradiction the firmest of all principles. Non-trivial contradictory logics not only permit inconsistencies in theories, but contain provable contradictions.

A prerequisite for a successful attendance in the seminar is some knowledge of non-classical logic and modal logic, including familiarity with Gentzen-style proof systems and Kripke models. We will discuss ongoing research into non-trivial contradictory logics and their applications in the philosophy of logic, and will read research papers, old and new, dealing with the notions of contradictoriness,

consistency, negation, triviality, and related concepts. These papers may range from rather informal to formal studies. Students can earn credits by presenting a paper and will get detailed feedback. The seminar will continue to run over several semesters.

Students interested in experimental work on the endorsement or rejection of certain logical principles that play a crucial role in obtaining non-trivial negation-inconsistent logics are also very welcome.

030115	Capita Selecta in logic and the foundations of mathematics			
	Blockseminar	TBA	TBA	Sanders

In this course, we provide an overview of the (historical) foundations of logic and mathematics, starting from the era of Russell, Hilbert and Brouwer. We aim for an understanding of the associated foundational philosophies (intuitionism, finitism, predicativism) along with a hint at the underlying mathematics and logic. The (rather direct) connection to Turing's computability theory and Goedel's incompleteness theorems is discussed. An outgrowth of all the aforementioned is the (more philosophically neutral) program of 'reverse mathematics'. We introduce the latter, discuss some examples, and provide a detailed study of recent applications in the philosophy of mathematics.

030007	Main Topics in Metaphysics			
	Lecture	Thu 10-12	ND 03/99	Rami

Fictional discourse provides some interesting and challenging puzzles that concern philosophy of language and mind, logic and metaphysics. One of the central questions of the current debate is whether we need to accept fictional objects, characters or stories as part of our ontology or at least as objects of thought to provide the correct semantic values, intuitive semantic referents and domains of quantification for different sorts of fictional discourse. In this seminar, we mainly aim to focus on this central question. The first two sessions of the seminar will provide an overview of the recent debate concerning our central research topic. After that, different experts in the field will either give online or in person talks in the seminar, and we will have the opportunity to discuss their views with them.

Literature:

Recommended Literature as introduction

Brock, S. and Everett, A. (2015): *Fictional Objects*, Oxford: University Press.
 Crane, Tim: (2013): *The Objects of Thought*, Oxford: University Press.
 Sainsbury, R.M. (2010): *Fiction & Fictionalism*, Routledge: London.
 Walton, K. (1990): *Mimesis as Make-Believe*, Cambridge, MA: Harvard University Press.

030102	Topics in Philosophy of Language, Logic and Information			
	Lecture	Wed 16-18	GA 04/187	Liefke, Rami

TBD

030124 Research Colloquium *Logic and Epistemology*

Colloquium

Thu 14-16

GABF 04/354

Kürbis, Skurt

In this colloquium students will have an opportunity to present a paper on a topic of their choice from philosophical logic or epistemology. This paper may or may not be related to an MA thesis. Background knowledge in analytic epistemology and philosophical logic is required. In addition to presentations by students, there will be talks by guest and invited speakers.

CP can be earned by giving an oral presentation.

Elective Module 3: Complementary Studies

030073	Argumentation	Blockseminar	05.09.25 10-16	Wasserstraße 221/4	Seselja, Straßer
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Philosophy and science are based on argumentation. Instead of just voicing opinions or stating beliefs, scholars give reasons and provide evidence for their conclusions. Argumentation is key when trying to find a consensus, or at least when identifying the roots of a disagreement. As such, it is central in many areas, from everyday life to political discourse. Needless to say, good argumentative skills are a necessary requirements for successful studies (in essay and thesis writing, for instance).

In this block seminar we will survey different facets of argumentation theory. We start off with foundations (argument schemes such as the Toulmin scheme, fallacy theory, types of arguments, etc.) and proceed towards contemporary investigations (e.g.: computational argumentation; Bayesian and probabilistic argumentation; pragma-dialectics; reasoning and biases; etc.). Finally, we will look into practical applications of argumentation in the context of structured debating.

Literature:

A reading list will be provided via Moodle at the beginning of the semester.

030128	EXTRA Research Colloquium <i>Metaphilosophy, Experimental Philosophy and Argumentation Theory</i>	Colloquium	Wed 16:30-18	TBA	Horvath
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In this colloquium in seminar-style, we will discuss current topics from argumentation theory, epistemology, experimental philosophy, and metaphilosophy, broadly construed. The colloquium will also host a number of talks by external guests, many of which are leading experts in their field. Advanced bachelor students, master students, and doctoral students are especially welcome in the colloquium, in which they can also acquire the normal range of credit points. Moreover, student participants can make suggestions for suitable readings to be discussed in the colloquium, and they will have the option of presenting their work, for example, related to their thesis, in English.

030074	Agent-based simulations in philosophy: theoretical part	Seminar	Fri 14-16	Wasserstraße 221/4	Seselja, Straßer
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In recent years, digital aspects have entered philosophy, both in terms of providing a plethora of new topics and by providing new perspectives on old questions. Moreover, the digital age also equips philosophy with new computational methods for tackling philosophical questions, such as computer simulations. This course is dedicated to this topic.

Computer simulations in the form of agent-based models (ABMs) have in recent years become a popular method in philosophy, particularly in social epistemology, philosophy of science and political philosophy. In this course we discuss some of the

central philosophical questions studied by means of ABMs. For instance, can groups of rational agent polarize, if yes, under which conditions? Can groups composed of agents that reason individually fully rationally (e.g., according to Bayesian standards) still be inefficient as a group? If yes, how so? Other topics concern questions from social epistemology and philosophy of science, such as the division of cognitive labor, cognitive diversity and expertise, opinion dynamics, etc.

This course will consist of three parts:

1. From October until December we will cover some of the most prominent modelling frameworks used in the philosophical literature and beyond. The readings will be aimed at preparing students for talks by experts on the topic, which constitute part 3.
2. At the end of January (part 3) we will have a workshop in which experts working in this field will come to RUB and present their work. During December students will choose a topic related to one of the talks in the workshop and start reading the relevant literature on it.
3. There will be no classes in January except for the workshop, which will take place from January 29-31, 2025 (we will start on January 29 in the afternoon). Students will have a task to follow the talks, and to subsequently submit a 2-pages protocol of one of the talks.

To get the ungraded 3 credit points for the course, students will have to:

- submit the protocol of one of the workshop talks
- prepare a question for the talk and ask the question either during the workshop, or submit it afterwards, together with the protocol.

To get 6 credit points and a grade for the course, students will have to submit the above mentioned assignments, and in addition, to submit a term paper.

We highly encourage the students to attend also the Practical part of this course, which takes place in the same room, right after the current course.

Literature:

A reading list will be provided during the course.

030076	Agent-based simulations in philosophy: practical part	Seminar	Fri 16-18	Wasserstraße 221/4	Michelini
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Can groups of biased scientists outperform groups of unbiased ones? Can citizens with only a slight preference for having like-minded neighbors give rise to a highly segregated city? Can rational epistemic agents polarize over the truth of a sentence?

The effect of individual actions on the collective outcome has always fascinated philosophers of many disciplines. In the last decade, to answer these and many more questions, philosophers have extensively used agent-based models. Agent-based models are computational programs that allow to explore the behaviour of a group of agents, starting from the rules guiding the actions of the individuals. As such, it is the ideal tool to explore the collective outcome of individual practices.

This course is meant to teach participants how to build an agent-based model from scratch. No pre-existing knowledge about programming is required: philosophy students with no computational background, you are welcome! At the same time, the

course is also ideal for people already experienced with programming who want to learn about how to use agent-based models.

We recommend taking this course in combination with the course “**Agent-based simulations in philosophy: theoretical part**”, although you can also take each of them separately (that would make sense if you followed the theoretical part last year). Each course can provide up to six credits.

The course is composed of four parts.

1. In October, I will teach you some fundamental basics required for programming. You will learn what program to use, how to install it, and which procedures are useful when building an agent-based model.
2. In November, we will go through some of the most famous examples of agent-based models in philosophy. I will teach you how to program them, and how to collect data from them.
3. Finally, December and January are dedicated to you building your own model. We will discuss together how to formulate nice ideas on which model to build, and I will help you step-by-step in building your own model.
4. The final three lectures will be dedicated to you presenting your work.

Literature:

The course material will be composed of handouts.

Seselja, Dunja (2023). “Agent-Based Modeling in the Philosophy of Science”. In: The Stanford Encyclopedia of Philosophy. Ed. Stanford University <https://plato.stanford.edu/entries/agent-modeling-philscience>

Grim, Patrick and Daniel Singer (2024). “Computational Philosophy”. In: The Stanford Encyclopedia of Philosophy. Ed. Stanford University. <https://plato.stanford.edu/entries/computational-philosophy/>

030093	Explainable Artificial Intelligence			
	Seminar	Wed 14-16	GABF 04/354	Wiese

This course deals with philosophical issues surrounding the transparency and accountability of artificial intelligence (AI) systems. Traditional AI is typically transparent; its algorithms are programmed to follow specific strategies, making their performance understandable to the programmers. In contrast, contemporary AI, often based on machine learning and large datasets, operates in a more opaque manner. The complexity of these systems means that while programmers understand how the algorithms work, they often cannot fully explain how an AI achieves successful outcomes or cannot predict the conditions under which it might fail. Put differently, there is – at least in many contexts – a trade-off between accuracy and interpretability.

Explainable AI (XAI) aims to alleviate this problem by providing insights into the functioning of current AI systems. This includes understanding successes and failures of AIs, which is crucial to assessing their reliability and trustworthiness. However, the concepts of explainable, interpretable, and trustworthy AI are themselves philosophically complex and ambiguous.

This seminar offers an overview of philosophical challenges related to XAI. It provides some insights into contemporary approaches to enhancing AI transparency, interpretability, and trustworthiness, fostering a critical understanding of these efforts. As a result, students will be able to critically discuss current approaches in AI development, as well as in AI ethics and governance.

Literature:

Beisbart, C., & R az, T. (2022). Philosophy of science at sea: Clarifying the interpretability of machine learning. *Philosophy Compass*, n/a(n/a), e12830. <https://doi.org/10.1111/phc3.12830>

Erasmus, A., Brunet, T. D. P., & Fisher, E. (2021). What is Interpretability? *Philosophy & Technology*, 34(4), 833–862. <https://doi.org/10.1007/s13347-020-00435-2>

Hatherley, J., Sparrow, R., & Howard, M. (2022). The Virtues of Interpretable Medical Artificial Intelligence. *Cambridge Quarterly of Healthcare Ethics*, 1–10. <https://doi.org/10.1017/S0963180122000305>

Rudin, C. (2019). Stop explaining black box machine learning models for high stakes decisions and use interpretable models instead. *Nature Machine Intelligence*, 1(5), 206–215. <https://doi.org/10.1038/s42256-019-0048-x>

Samek, W., Montavon, G., Lapuschkin, S., Anders, C. J., & Muller, K.-R. (2021). Explaining Deep Neural Networks and Beyond: A Review of Methods and Applications. *Proceedings of the IEEE*, 109(3), 247–278. <https://doi.org/10.1109/JPROC.2021.3060483>

Zerilli, J., Knott, A., Maclaurin, J., & Gavaghan, C. (2019). Transparency in Algorithmic and Human Decision-Making: Is There a Double Standard? *Philosophy & Technology*, 32(4), 661–683. <https://doi.org/10.1007/s13347-018-0330-6>

211122	<i>Perlen der theoretischen Informatik</i>			
	Seminar	Tue 14-16	MC 01/54	Zeume

Wo verl uft die Grenze zwischen Entscheidbarkeit und Unentscheidbarkeit?
 Welche Probleme lassen sich mit moderatem Ressourcenaufwand l sen?
 Wo liegen die Grenzen unserer Methoden zum Nachweis unterer Schranken an den Ressourcenbedarf von Problemen?
 Was kann  berhaupt bewiesen werden?
 In diesem Seminar besch ftigen wir uns mit fortgeschrittenen Themen der Theoretischen Informatik.

Das Seminar richtet sich an Bachelorstudierende der Informatik, ITS und Mathematik.

Anmeldung/Platzvergabe:

Die Platzvergabe erfolgt zentral durch die Fakult t bis zum 31.08.24:

<https://moodle.ruhr-uni-bochum.de/course/view.php?id=59492>

Innerhalb dieser Frist m ssen Sie sich auch f r die zugeh rige Pr fung in Flexnow anmelden.

Informationen zu den Fristen finden Sie auf der Website des Pr fungsamtes der Fakult t f r Informatik.

030132	Technikphilosophisches Forschungskolloquium			
	Colloquium	Tue 16-18	GABF 04/352	Weydner-Volkmann

Forschungskolloquium zu Themen der Technikphilosophie und Technikethik. Es werden Konzepte für BA- und MA-Abschlussarbeiten vorgestellt und diskutiert. Zudem werden aktuelle Forschungstexte und Entwürfe gelesen und diskutiert. Im Rahmen des Colloquium Digitale wird das Forschungskolloquium durch Gastvorträge zu Themen der Ethik und Philosophie der Digitalisierung ergänzt.

Organisatorischer Hinweis:

Bedingung für die Teilnahme ist die Anmeldung (bzw. Planung) einer Abschlussarbeit im Arbeitsbereich „Ethik der digitalen Methoden und Techniken“. Bei regelmäßiger Teilnahme und dem Vorstellen eines eigenen Konzeptes kann eine kleine Studienleistung erworben werden.

030005	Introduction into Cognitive Science			
	Lecture	Tue 12-14	HGA 20	Newen, Rose

The lecture is offered in English only. Philosophy students can participate in this intensely interdisciplinary lecture to learn central concepts and methods in cognitive science. Cognitive science developed into a central basis of modern philosophy of mind, epistemology and theories of AI systems. Thus, we offer philosophy students (in all programs) insight into Cognitive Science. A precondition is a very good performance in the logic course in philosophy. The lecture can be used to earn an ungraded certificate on the basis of a written exam. Philosophy students can choose a focus on theoretical concepts but also have to learn central knowledge in cognitive neuroscience as well as computational modelling.

The detailed sequence of the lectures and topics will be announced in the first session which will start with Lecture 1 “Theoretical Frameworks in Cognitive Science 1”. Central Topics of the lectures include the following (open for change of sequences and some adjustments of research topics each year):

- Theoretical Frameworks in Cognitive Science 1
- Cognitive Neuroscience of Perception
- Theoretical Frameworks in Cognitive Science 2
- Theories of Consciousness
- Cognitive models of semantics and pragmatics
- Cognitive Neuroscience of Emotion
- Theories of Emotion
- Cognitive Neuroscience of Memory
- Theory of Perception and Cognition
- Stress and its role for cognitive abilities
- Computational approaches to Cognitive Science
- Reinforcement Learning in the Brain 1

Reinforcement Learning in the Brain 2
Supervised Learning in Neural Networks

Literature:

The literature will be provided via Moodle during the course.

030131	Philosophy Meets Cognitive Science: Memory and Language			
	Colloquium	Tue 12-14	GA 04/187	Werning

In the research colloquium current topics at the interface between Philosophy and Cognitive Science will be discussed. The colloquium hosts talks by leading international experts and local researchers as well as presentations by doctoral and master students. Students will be given the (assisted) opportunity to present their projects in English.

This semester the sessions of the research colloquium will alternate in a bi-weekly rhythm between the topics “Memory” and “Language”. A detailed schedule will be published in due course at <https://www.ruhr-uni-bochum.de/phil-lang/colloquium.html>. Talks will be held either online via Zoom or in person.

030114	“I, Me, and Mine”: The Self from Kant to Freud, Wittgenstein, and Sartre			
	Seminar	Wed 10-14	GABF 04/714	Vernazzani

What is self-consciousness, and in what ways does it relate to our use, in language and in thought, of the first person pronoun ‘I’? This question, first raised by Kant in his first Critique, is at the core of Béatrice Longuenesse’s last book *I, Me and Mine: Back to Kant and Back Again* (OUP, 2017). In this ambitious work, Longuenesse explores recent developments in the philosophy of self-consciousness, starting from Wittgenstein’s famous distinction between ‘I’ as an object and ‘I’ as a subject, which has largely dominated analytical philosophy in the last decades, to Gareth Evans’s and Jean-Paul Sartre’s accounts of bodily self-consciousness. Longuenesse argues for a reassessment of Kant’s distinction between consciousness of one’s own body and consciousness of mental unity, i.e. a specific organization of mental events. Focusing on the latter, Longuenesse argues that the most promising account of mental unity preserving the Kantian insights can be found in Freud’s theory of the “ego,” an internal organization of mental events according to the “reality principle” and governed by elementary logical rules that allow us to acquire a reliable representation of the world.

Literature:

In this seminar, we will read and discuss Longuenesse’s book along with passages from Kant, Wittgenstein, Evans, Sartre, and Freud. As introductory reading, I would recommend Andrew Brook & Julian Wuerth (2023) “Kant’s View of the Mind and Consciousness of Self” in *The Stanford Encyclopedia of Philosophy*, ed. by E. N. Zalta & U. Nodelman <https://plato.stanford.edu/archives/spr2023/entries/kant-mind/> (especially §4).

030077	Science in a Political World			
	Seminar	Fri 12-14	Wasserstraße 221/4	Seselja, Straßer

Scientific inquiry is embedded in society and it is influenced by cultural, political, economic and historical contexts. Which questions to inquire, which hypotheses to pursue, which methods to employ and which theories to accept as the basis for policy guidance is influenced not only by scientific evidence and epistemic values, but also by non-epistemic (or social) values. At the same time, scientific findings should have the mark of objectivity rather than the mark of politicized processes. In this course, we will explore complexities that underpin this tension. We will start with the literature on the value-free ideal of science and proceed towards discussions on politicized science. Throughout the seminar we will use articles from online media, illustrating the tension between science and politics through various examples, as the testbed for philosophical accounts on the given issues.

Literature:

The reading list will be provided at the start of the course.

030075	Fact-checking of Scientific Claims: a Philosophy of Science Perspective			
	Blockseminar	09.11.24; 07.12.24; 25.01.25 10-16 (+ online tutoring in between)	TBA	Seselja

Contemporary social discourse has been flooded by fake news, echo-chambers, epistemic bubbles and other epistemically pernicious processes. Scientifically relevant information has not been spared: from 'anti-vaxxers' to climate-change deniers, disinformation has also had an effect on scientifically relevant news.

To combat such issues, social media have introduced the practice of 'fact-checking'. However, fact-checking of scientific claims can be challenging. To start, neither does the frontier of scientific research typically produce 'facts', nor can such claims easily be 'checked'. Ongoing inquiry, often pervaded by scientific disagreements and controversies, is characterized by incomplete or conflicting evidence, and hence by a high degree of risk and uncertainty. At the same time, an unhinged spread of false or deceptive information can easily have numerous harmful consequences, including the loss of public trust in science.

In this block seminar we will start from the philosophical discussions on the evaluation of scientific hypotheses, and the role of values in scientific inquiry. In addition, we will look into recent controversies surrounding the fact-checking of scientific claims. Throughout the course, students will work in teams, where each team will choose a case-study to research. The result of the research will be presented in the final block. The course will consist of three blocks, to be held on

Saturdays. In addition, teams will have (online) coaching sessions in between the blocks.

Literature:

The reading list will be provided at the start of the course.

030004	Lecture Series <i>Ethics for Economics, Law, and Politics</i>			
	Lecture	Wed 18-20	GA 03/149	Steigleder

In this lecture series the faculty members of the master's program "Ethics - Economics, Law, and Politics" (EELP) as well as invited speakers take turns giving talks on each of the focus topics of the EELP program from the perspective of their disciplines.

The lecture series, which is part of the master's program "Ethics – Economics, Law and Politics" may also be attended by master's students of philosophy and by advanced students in the bachelor's degree course in philosophy. Credit points can be acquired by writing summaries and essays.

The program of the lecture series will be announced at the beginning of October. The lectures will be held in English.

040169	Die Geschichte der Atomkraft: Hoffnungen, Realitäten, Bomben			
	Seminar	Mon 10-12	GA 04/149	Uekötter

Atomkraft ist wieder schick: Eine Mehrheit der Bundesbürger war gegen die Abschaltung der letzten deutschen Kernkraftwerke im April 2023. Es ist die jüngste Wendung in einer Geschichte, die seit dem Zweiten Weltkrieg Politik und Wirtschaft, Gesellschaft und Rüstung nachhaltig geprägt hat. Das Hauptseminar diskutiert die Entwicklung mit einem Schwerpunkt auf Deutschland und spannt den Bogen von den Hoffnungen und Ängsten der Adenauerzeit über den Bauboom in den siebziger Jahren und dem Aufstieg einer zivilgesellschaftlichen Bewegung. Dabei thematisiert die Veranstaltung auch die Atomgeschichte seit den achtziger Jahren, die bislang von der historischen Forschung erst bruchstückhaft behandelt worden ist. Das Ende der nuklearen Stromerzeugung in Deutschland ist auch eine Chance für eine Atomgeschichte, in der die Frage nach Pro und Contra nicht mehr überwältigend ist auch wenn die Nachzerfallswärme vergangener Konflikte weiterhin zu spüren ist.

030117	Ethics of Infectious Diseases			
	Seminar	Tue 16-18	GABF 04/511	Steigleder

The seminar is part of the master's program "Ethics - Economics, Law, and Politics" and will therefore be taught in English. It may also be attended by students of the master's programs in philosophy and by advanced students in the bachelor's degree course in philosophy.

Infectious or communicable diseases have the peculiarity that an infected person may not only need care but may also constitute a risk for other people. Depending

on the disease the risk may involve severe illness or even death. Contagion may lead to a sudden outbreak, i.e. the remarkable presence of quite a number of cases at a certain place, of an already known or as yet unknown or new infectious disease and an ongoing spread of the disease to other places within a country, to several countries and around the globe.

In the seminar we will look at different communicable diseases and will try to develop moral criteria for adequately dealing with different kinds of infection risks. We will look at the different levels of responsibility during a contagious disease pandemic, the duties of governments to protect their citizens and to help the people of other countries. We will also look at the moral rights and duties concerning vaccinations.

Each participant is required to write two essays (5-7 pages) on the topic of two different sessions of the seminar.

Literature (useful reading):

Margaret P. Battin, Leslie P. Francis, Jay A. Jacobson, Charles B. Smith, *The Patient as Victim and Vector: Ethics and Infectious Disease*, New York: Oxford University Press, 2009.

Klaus Steigleder, Johannes Graf Keyserlingk, *Public Tasks During Contagious Disease Pandemics: A Rights-Based Perspective*, in: Michael Boylan (ed.), *Ethical Public Health Policy Within Pandemics: Theory and Practice in Ethical Pandemic Administration*, Cham: Springer, 2022, 149-166.

At the beginning of the seminar, the texts of the seminar will be provided as a download in Moodle.

060012	Normative Legal Philosophy			
	Seminar	Tue 08-10	HZO 90	Magen

TBD

030110	Philosophy and Norm Psychology			
	Seminar	Tue 12-14	GABF 04/514	Berio

Every aspect of our life is permeated by norms - but how do we learn them? What psychological mechanisms underlie our ability to internalize and follow norms, and how did these mechanisms evolve?

The class offers an overview of interdisciplinary research into the psychological capacity for norm-guided cognition, motivation, and behavior.

Literature:

Possible background reading:

Richerson, P. and Boyd, R. (2005). *Not By Genes Alone: How Culture Transformed Human Evolution*

Sterelny, K. (2012). *The Evolved Apprentice: How Evolution Made Humans Unique*
 Moral Tribes: Emotion, Reason, and the Gap Between Us and Them, by Joshua
 Greene (2013)

Henrich, J. (2015). *The Secret of Our Success: How Culture Is Driving Human
 Evolution, Domesticating Our Species, and Making Us Smarter*

Bicchieri, C. (2016). *Norms in the Wild: How to Diagnose, Measure, and Change
 Social Norms*

030086	New Perspectives on Kant's Practical Philosophy + Workshop			
	Seminar	Thu 16-18	GA 03/46	Mieth

Every aspect of our life is permeated by norms - but how do we learn them? What psychological mechanisms underlie our ability to internalize and follow norms, and how did these mechanisms evolve?

The class offers an overview of interdisciplinary research into the psychological capacity for norm-guided cognition, motivation, and behavior.

Possible background reading:

Richerson, P. and Boyd, R. (2005). *Not By Genes Alone: How Culture Transformed
 Human Evolution*

Sterelny, K. (2012). *The Evolved Apprentice: How Evolution Made Humans Unique*
 Moral Tribes: Emotion, Reason, and the Gap Between Us and Them, by Joshua
 Greene (2013)

Henrich, J. (2015). *The Secret of Our Success: How Culture Is Driving Human
 Evolution, Domesticating Our Species, and Making Us Smarter*

Bicchieri, C. (2016). *Norms in the Wild: How to Diagnose, Measure, and Change
 Social Norms*

210032	Introduction to Methods in the Study of Religion			
	Seminar	Wed 14-16	Uni90a, 0/013	Elwert, Freudenberg, Rezania

This course introduces students to the logics of empirical research as well as a range of methods in the study of religion as they are applied at CERES. We will learn how empirical research projects are designed and conducted, what distinguishes qualitative from historical-philological from digital humanities methods, and why methods are necessary in the first place. As an overview, this introductory course equips students for more in-depth methods courses to follow later in the degree program.