

Syllabus

<u>Course Title:</u>	Naturalizing Rationality
<u>Instructor:</u>	Andrei RODIN
<u>Institution:</u>	St.-Petersburg State University, Smolny College
<u>Country:</u>	Russia

Description and Aims of the Course

This course is an overview of the continuing discussion on relationships between Nature and Rationality. Is the human rational thinking a particular natural phenomena among many others or the Nature itself is nothing but a rational social construction? Are the two views compatible or not? The course covers both the history of the issue and the current discussion.

The course is designed for students of Smolny studied by individual working plans. Particularly it serves to those students who wish to combine their studies in humanities with a sound scientific basis.

Prerequisites

(i) Good knowledge of the standard educational program in sciences thought in Russian school or its equivalent and (ii) basic knowledge of the history of Western philosophy. Any further expertise in science and/or philosophy is an advantage.

Organization, readings, and resources

The course comprises 10 class sessions: 8 lectures followed by seminars (2+2 academic hours), the mid-term exam, and a session of student presentations. During the course students pass the mid-term exam, make paper proposals, present their research project and submit final papers by the end of the semester.

Course Content and Schedule

Week 1. Introduction: Science, Mind and Nature

Reading:

- Feynman et al., *Physics and other sciences* in: The Feynman's lectures on physics v.1, ch.3
- Vernadsky, *Scientific thought and scientific work as a geological power in the biosphere* in: Scientific thought as a planetary phenomenon, ch.1

Questions for the seminar:

- Why we have multiple scientific disciplines (physics, chemistry, biology, cognitive science, etc.) but not a single science about the Nature?
- Are you agree with Feynman that physics is the "most fundamental of all sciences"? Argue pro and contra.
- How Vernadsky understands relationships between philosophy and natural sciences?
- Does Vernadsky have indeed a reason to consider the historical development of science and geological processes on the same footing?

Week 2. Rational Animal: Nature and Rationality in the Classical Age

Reading:

- Plato, *Timaeos*
- Aristotle *Physics*, book 2 (B), ch.1, *De Anima*

Questions for the seminar:

- Is Plato's theory of perception and cognition reasonable from the point of view of contemporary science?
- What is "Nature" in Aristotle's view?
- Explain Aristotle's definition of human being as "rational animal"?

Week 3. Modern Scientific Revolution and the Dilemma Empiricism vs. Rationalism

Reading:

- I. Kant, *Critique of Pure Reason*. Preface to First edition; *Metaphysical Foundations of Natural Sciences*, Introduction

Questions for the seminar:

- Are Empiricism and Rationalism compatible?
- What in Kant's view is "good" and what is "bad" metaphysics?
- What is Kant's "critical philosophy"?
- What Kant thinks about relationships between natural sciences and philosophy

Week 4. Mind and Body

Reading:

- R. Descartes, *Discourse on Method*
- H. Feigl, *The "Mental" and the "Physical"*

Questions for the seminar:

- How minds can effect physical actions?
- What is mental and what is physical in Descartes' view?
- Is there a possible science of the mental (existing along with sciences of the physical)?

Week 5. Mid-term Examination (25%)

Week 6. Epistemology Naturalized

Reading:

- W. Quine *Epistemology Naturalized*
- J. Fodor *The Dogma that Didn't Bark (A Fragment of a Naturalized Epistemology)*.

Questions for the seminar:

- Apply Kant's arguments to criticize Quine's thesis. Apply Quine's arguments to criticize Kant. Who is right?
- Suppose Kant is right. What then empirical studies of cognition are about?

The deadline for Final Paper Proposals. (5%)

Week 7. Evolution and Cognition

Reading:

- Ch. Darwin, *The Origin of Species*, ch.4 "Survival of the fittest"
- K. Lorenz, *Behind the Mirror: a Search for a Natural History of Human Knowledge*

Questions for the seminar:

- What are epistemological implications of Darwin's theory of biological evolution (if any)?
- Does human knowledge have a "natural history"? Apply Kant's argument against Lorenz and vice versa.

Week 8. Rationality Naturalized: Adaptive Thinking

Reading:

- G. Gigerenzer, *Adaptive Thinking: Rationality in the Real World Evolution and Cognition* (fragment)

Questions for the seminar:

- What is a rational action? (use examples from different areas).
- May an adoptive strategy be irrational? May a non-adoptive strategy be rational?

Week 9. Rationalism, Anti-Rationalism, and Multiculturalism

Reading:

S. Lukes, Some Problems about Rationality in: B. Wilson (ed.) *Rationality*

L. Auster, *How Multiculturalism Took Over America* FrontPageMagazine.com July 9, 2004

Questions for seminar:

- Is there a sense of being "rational" invariant across all cultures and historical circumstances?
- May an action be rational locally but not globally or vice versa? Provide examples.

Week 10. Student presentations (20%)

Weeks 11-13. Individual consultations on student research projects

Office hours: Tuesdays and Thursdays 4-6 p.m.

Week 14. The deadline for final papers (12-15 pages; 40%)

Week 16. Reporting of assessment results.