



Exchange programme Vrije Universiteit Amsterdam

Vrije Universiteit Amsterdam - Exchange programme Vrije Universiteit Amsterdam - 2024-2025

Exchange

Vrije Universiteit Amsterdam offers many English-taught courses in a variety of subjects, ranging from arts & culture and social sciences, neurosciences and computer science, to economics and business administration.

The International Office is responsible for course approval and course registration for exchange students. For details about course registration, requirements, credits, semesters and so on, please [visit the exchange programmes webpages](#).

Nature versus Nurture

Course Code	AB_1057
Credits	6
Period	P1
Course Level	300
Language Of Tuition	English
Faculty	Faculty of Science
Course Coordinator	dr. R.M. Brouwer
Examiner	dr. S. van der Sluis
Teaching Staff	dr. R.M. Brouwer, dr. S. van der Sluis
Teaching method(s)	Lecture, Study Group, Computer lab, Practical

Course Objective

Students learn how individual differences in human complex behavior can be explained. In this course, the emphasis is strongly placed on recent developments in human genetic research.

Course Content

Humans vary in their behavior and in their vulnerability to disease. In the Nature versus Nurture course, the influence of genes and of environmental factors on individual differences in human behavior will be discussed. The course starts with an historical overview of the nature-versus-nurture debate, and describes how twin- and family studies paved the way for current genetic research. The course specifically focuses on the rapid developments in the field of complex trait genetics, that allow researchers to search the entire genome for parts of the DNA that are predictive of human behavior and disease. We will examine how the research design and definition of phenotype influences the outcome and interpretation of these studies. We will discuss recent large-scale gene-finding studies and discuss how these translate to state-of-the-art neuroscience research, and how they inspire studies on personalized treatments in medical practice. In addition, ethical aspects of current genetic research will be discussed.

Additional Information Teaching Methods

Lectures, discussion groups, presentations.

Method of Assessment

The final grade of Nature versus Nurture is based on weekly assignments, a group presentation on an ethical aspect of genetic research, and a written exam (multiple choice and open questions). The course Nature versus Nurture is successfully completed if both the exam grade and the final aggregate grade are 5.5 or higher.

Entry Requirements

This course is part of the minor Brain and Mind. University students need at least 90 ECTS to be eligible for (courses in) this minor. HBO students can follow (courses in) this minor if they have at least 120 ETCS.

Literature

Lecture notes, scientific papers, TBA during course

Additional Information Target Audience

This course is part of the minor "Brain and Mind". This minor is accessible to third year BSc students from alpha, beta, and gamma sciences (e.g., Sociology, Psychology, Economics, Law, Artificial Intelligence, computer science, criminology) and students from Life sciences (e.g., Biology, Physics, Chemistry, Medicine, Movement Science, Nutrition) with a broad interest in neuroscience. Students of Biomedical Sciences and Health and Life Sciences as

well as students who plan to pursue a career in Neuroscience cannot follow this minor but are referred to the more specialized minor "Biomolecular/Neurosciences".

Recommended background knowledge

Broad interest in brain, behavior, psychology, genetics and neuroscience