

Doctoral School: **Biology Doctoral School**  
Doctoral Program: Neuroscience and Human Biology

Subject code: **BIO/7/47**

Subject title: **Human evolution I**

Teacher and Neptun code: **Dr. Hajdu Tamás (NLVRBV)**

Credits: 4

Class hours: 2 hours/week, lecture

#### Aims of the course

The aim of the lecture is to present primate taxonomy and evolution as well as human evolution based on fossils and the latest genetic findings.

#### Contents of the course

1. General characteristics of non-human primates. Occurrence, lifestyle, forms of movement, nutrition, use of equipment.
2. Systematics of humans and extant primates. Extant primate taxonomy.
3. Molecular clocks
4. Appearance and spread of primate-like, half-apes and real apes. Evolution of primates.
5. Prevalence and Miocene age diversity of early hominoids. The emergence and spread of anthropoids.
6. Praeanthropus phase. Earliest hominids living before Australopithecus. Australopithecus species.
7. Archanthropus Phase I. Appearance of the earliest Homo species.
8. Archanthropus phase II. Appearance and spread of Homo erectus.
9. Archanthropus phase III. The Homo heidelbergensis.
10. Paleanthropus phase. The last "dead ends" (?): Homo neanderthalensis, Homo floresiensis, and the Denisova man. The emergence and spread of the Neanderthal man, and the dead ends of the Homo genus, the "hobbit," the man of Denisova, and Homo naledi.
11. Neanthropus phase. The emergence of modern Homo sapiens and the population of the Earth.
12. Research on human evolution with the tools of modern genetics I. Research on the hereditary material of the Neanderthal and Denisova people.
13. Research on human evolution with the tools of modern genetics II. Mitochondrial Eve and Y Adam.
14. Cultural evolution. Stone tools, fire, accommodation, clothing ...

#### Requirements

Oral exam

Grade is determined by the exam result.

#### Literature

lecture slides are available

Gyenis-Gyula és Hajdu Tamás 2017: Az emberré válás – Az ember biológiai és kulturális evolúciója. Archeolingua Kiadó

