Bachelor's courses Faculty of Behavioural and Movement Sciences

VU University Amsterdam - Student- & Onderwijszaken - Exchange programme Vrije Universiteit - 2018-2019

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Molecular Genetics

Course code	P_BMOLGEN ()
Period	Period 5
Credits	6.0
Language of tuition	English
Faculty	Fac. der Gedrags- en Bewegingswetensch.
Coordinator	dr. H. Mbarek
Examinator	dr. H. Mbarek
Teaching staff	dr. R. Pool, dr. H. Mbarek
Teaching method(s)	Lecture, Computer lab
Level	300

Course objective
To obtain insight in DNA and in molecular biological techniques.

Course content
Since (most of) the human genome is sequenced, research searching for genes involved in behavioral traits exponentially increased. For those studies, DNA is collected from subjects. After DNA collection, the DNA is isolated and measured in a laboratory. This course evaluates the different techniques that can be used to manipulate DNA like sequencing, PCR and gel electrophoreses. The structure of the genome (structure of a DNA molecule, coding/non- coding DNA, mutations etc.) and how genomes function in cells (gene expression, DNA transcription/translation, DNA replication etc) will also be explained.

Form of tuition
2 x 2 hrs lectures + 1 x 2 hrs teacher-guided small-group lecture/practical per week

Type of assessment
Written examination (2/3 of final grade) and writing assignment (1/3 of final grade). Partial grades are only valid during the study year in which the grade has been achieved.

Course reading
T. Strachan & A. Read (2010). Human Molecular Genetics (4th edition).

Remarks
This course is taught in English