

COURSE DETAIL

LAB SKILLS: GENETICS

Country

Netherlands

Host Institution

Maastricht University - University College Maastricht

Program(s)

University College Maastricht

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

114

UCEAP Course Suffix

L

UCEAP Official Title

LAB SKILLS: GENETICS

UCEAP Transcript Title

LAB GENETICS

UCEAP Quarter Units

2.00

UCEAP Semester Units

Course Description

This course introduces students to the basic principles and techniques in genetics, to develop basic competences in the planning and performance of experiments and the evaluation of results, as well as writing reports. The course covers topics such as DNA and RNA isolation/purification, spectrophotometry for nucleic acid quantification, amplification of specific genetic regions, gel electrophoresis and basic bioinformatics (commonly used databases, finding the genetic location of a specific gene and its gene sequences, design amplification primers for a specific genetic region, etc.) using online available tools. The emphasis is on genetic variation, which is relevant for human clinical diagnostic setting, evolution studies, etc. Furthermore, this course provides basic knowledge on Good Laboratory Practice (GLP) and Laboratory Safety Regulations. Students work in pairs. Lab experience is not required, although biological and chemical background knowledge at secondary school level is recommendable for full understanding of the provided techniques. If necessary, in the first lab session, pipetting skills are trained.

Language(s) of Instruction

English

Host Institution Course Number

SKI2088

Host Institution Course Title

LAB SKILLS: GENETICS

Host Institution Course Details**Host Institution Campus**

University College Maastricht

Host Institution Faculty**Host Institution Degree**

Host Institution Department

Skills

Course Last Reviewed

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