COURSE DETAIL

DEVELOPMENTAL BIOLOGY AND GENETICS
Country Sweden
Host Institution Lund University
Program(s) Lund University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Biological Sciences
UCEAP Course Number 163
UCEAP Course Suffix
UCEAP Official Title DEVELOPMENTAL BIOLOGY AND GENETICS
UCEAP Transcript Title DEV BIO GENETICS
UCEAP Quarter Units 12.00
UCEAP Semester Units 8.00

Course Description
The course presents basic principles of developmental biology and genetics, focusing especially on model systems such as Drosophila and mice. It starts with an introduction to genetics covering meiosis, Mendelian crosses, linkage analysis, and population genetics. Furthermore, the course includes elementary hypothesis testing and discussion of the ethical aspects of using genomic tools in medicine. In the following weeks, the course deals with the most important processes of early embryonic development, such as fertilization, early cell division including cleavage patterns and asymmetries, axis formation, gastrulation, development of the nervous system, limb development and regeneration, organ formation, and the impact of the environment on embryonic development. Moreover, the course provides insights into the use of knowledge from developmental biology for the establishment of animal models in studies of disease and drug effects.

Language(s) of Instruction
English

Host Institution Course Number
BIMA82

Host Institution Course Title
DEVELOPMENTAL BIOLOGY AND GENETICS

Host Institution Course Details

Host Institution Campus
Medicine

Host Institution Faculty

Host Institution Degree

Host Institution Department
Biomedicine

Course Last Reviewed

Print