LUND UNIVERSITY
Faculty of Medicine

Biomedicine
Courses - Bachelor Programme

Developmental Biology

Course code	Duration	Credits
BIMA	9 weeks	13.5 ECTS

Curricular Position	Study period	Language
Semester 5 (Year 3)	1	English

Prerequisites

2 years of studies in Biomedicine (First cycle courses, Bachelor level) at Lund University including the courses BIMA34 (physiology) and BIMA35 (patobiology and pharmacology) or equivalent credits in biomedicine or science.

Course Content

The course gives an introduction into basic principles of developmental biology. Particular focus will be on animal model systems such as the fruitfly Drosophila or the mouse. The course is built up in blocks (usually one week) that deal with processes and mechanisms of early embryonic development, i. e. gametogenesis, oogenesis, fertilization, early cleavage and specific cleavage patterns, axis formation, gastrulation, development of the primitive nervous system, limb development, organ formation and stem cells. In addition, one week deals with important cell-cell signaling events during early development. The course will also present some aspects of how animal model systems can be used to develop therapeutic agents to cure diseases. After the lecture weeks, one week will be allocated for preparation of the written exam.

Laboratory Practice and Assessments

Certain weeks contain practical demonstrations or smaller tutor-guided experiments which are usually connected to the theme of the week.

Teaching Methods and Examination

The course uses problem-based learning (PBL) throughout the whole period. A typical week starts with the first PBL tutorial, followed by several introductory lectures. At the end of the week, another PBL tutorial summarized the findings of the weeks, followed by a summarizing lecture dealing with special issues that may have shown up during the tutorials or the lectures. During the week, the students usually learn in groups. Most weeks also have demonstrations or small experiments related to the topic of the week. In addition, at least 2 article presentations/week are held by the students. After the teaching phase, one week is allocated for preparing for the final test. The written test is composed of a number of questions requiring short answers, complemented by larger essay questions. All events except the lectures are mandatory for succesful completion of the course.

Recommended Literature

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Will be presented at least one month prior to the course start on the homepage of the course.

Course Coordinator	E-mail
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Additional information

The course is classified as a First Cycle course (Basic level) and is part of the Bachelors programme in Biomedicine.
Students are automatically enrolled in the course Professional Development 5 (1.5 ECTS).
Course home page:
http://www.med.lu.se/biomedicin/kandidatprogram/aar_3_termin_5_6/utvecklingsbiologi