# COURSE DETAIL

| DEVELOPMENTAL BIOLOGY |
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| **Country**<br>Netherlands |
| **Host Institution**<br>Utrecht University |
| **Program(s)**<br>Utrecht University |
| **UCEAP Course Level**<br>Upper Division |
| **UCEAP Subject Area(s)**<br>Biological Sciences |
| **UCEAP Course Number**<br>130 |
| **UCEAP Course Suffix** |
| **UCEAP Official Title**<br>DEVELOPMENTAL BIOLOGY |
| **UCEAP Transcript Title**<br>DEVELOPMENT BIOL |
| **UCEAP Quarter Units**<br>6.00 |
| **UCEAP Semester Units**<br>4.00 |

**Course Description**
This course addresses the normal development as well as disorders of development of the animal organism, and pays specific attention to the genetic, hormonal, and environmental variables that influence the proliferation and differentiation of cells. Topics covered include: conception, cleavages, gastrulation, neurulation, formation of axes, Hox-genes, cell differentiation, sex determination and differentiation, reproduction, organogenesis, evolution and development, recombinant/knock-out/transgene animals, teratology. The course also covers the following: embryonic development of the model systems used in developmental biology: mouse, zebra fish, Xenopus, Drosophila, and C. elegans; how molecular and genetic information of DNA is translated into the developmental plan of an embryo, cell differentiation, formation of organs, growth of an embryo to a mature individual, and the relationship between developmental biology and evolution; how disturbances of these processes can lead to a deregulation in cell growth or cell differentiation and to impairment of development. Textbook: PRINCIPLES OF DEVELOPMENT by L Wolpert. Prerequisites for the course include: basic knowledge of transcription, translation, cell-cell-interaction, signal transduction, cell cycle control, embryo genesis.

**Language(s) of Instruction**
English

**Host Institution Course Number**
BMW20705

**Host Institution Course Title**
DEVELOPMENTAL BIOLOGY

**Host Institution Course Details**
https://osiris-student.uu.nl/onderwijscatalogus/extern/cursus

**Host Institution Campus**
Utrecht University

**Host Institution Faculty**

Medicine

**Host Institution Degree**

**Host Institution Department**

**Course Last Reviewed**
2023-2024

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