

COURSE DETAIL

REPRODUCTION AND IN VITRO FERTILIZATION

Country

Netherlands

Host Institution

Utrecht University

Program(s)

Utrecht University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

160

UCEAP Course Suffix**UCEAP Official Title**

REPRODUCTION AND IN VITRO FERTILIZATION

UCEAP Transcript Title

REPRODUCTION & IVF

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course offers a study of reproduction. The course discusses topics including regulation of oogenesis and folliculogenesis and processes involved in follicle development; the female hormonal cycle, regulation of ovulation, pathologies in the female cycle, and intervention possibilities for the human species; the process of spermatogenesis, the functional concept of sperm cell, the importance of sperm maturation, transport, and activation for the fertilization; recognition and mating behavior at estrus of animals; the physiology of copulation; Artificial Reproductive Techniques (ART); the development of zygote to blastocyst; maternal recognition of the conception; regulation of birth; embryo and primary stem cells; cloning and preparation of embryonal stem cells and the application of these techniques for production of organs and organisms; reproductive ageing and degeneration of gonocytes; ethical considerations in ART; FISH and prenatal diagnosis of chromosomal aberrations; and principles of advanced detection techniques for detection of processes in living gametes and embryo's. The course consists of lectures, discussions, and practicums. The course requires the completion of the biomedical sciences curriculum or the equivalent as a prerequisite.

Language(s) of Instruction

English

Host Institution Course Number

BMW30805

Host Institution Course Title

REPRODUCTION AND IN VITRO FERTILIZATION

Host Institution Campus

Utrecht University

Host Institution Faculty

Medicine

Host Institution Degree

Host Institution Department

[Print](#)