

# **REPRODUCTION AND DEVELOPMENT (REPD)**

#### **REPD 372 Reproduction and Development Units: 3.00**

Students will obtain a general background on various aspects of human reproduction, ranging from male and female gamete development to pregnancy and birth. The course will serve as a gateway to more advanced courses in human reproduction and development.

NOTE Also offered online. Consult the Bachelor of Health Sciences program.

LEARNING HOURS may vary 120 (600;60P)

**Requirements:** Minimum 3rd year (Level 3) standing, one of (ANAT 100/3.0; ANAT 101/3.0; [ANAT 215/3.0 and ANAT 216/3.0]; [ANAT 315/3.0 and ANAT 316/3.0]) and one of (PHGY 210/6.0; PHGY 214/6.0; [KNPE 125/2.0 and KNPE 225/3.0]; [PHGY 215/3.0 and PHGY 216/3.0]). **Offering Faculty:** Faculty of Health Sciences

### **REPD 387** Sexual Dimorphism in Reproductive Pathologies Units: 3.00

This course will be focus on, 1. Common and rare reproductive pathologies with sex and gender associated susceptibilities and disease outcomes. 2. Role of sexual dimorphism in etiology, pathogenesis and immune responses of reproductive diseases. 3. Conventional and advanced tools in diagnosis and treatment of reproductive diseases. LEARNING HOURS 120 (24L;12S;36G;48P)

**Requirements:** Prerequisite Level 3 and (registration in a LISC/BCHM Major or Specialization Plan or BHSC program) and (a GPA of 2.5) and one of (MICR 270, MICR 360, BMED 386) and BCHM 218

Offering Faculty: Faculty of Arts and Science

#### **REPD 416 Biology of Reproduction Units: 3.00**

Comprehensive overview of cellular and molecular biology of mammalian

reproduction including gametogenesis, fertilization, early embryo development and placentation; selected topics of clinical aspects of reproduction. Participation in seminars and group discussion is required.

LEARNING HOURS 120 (36L;36S;48P)

**Requirements:** PREREQUISITE Level 4 and (registration in a LISC Major or Specialization plan) and (a GPA of 2.7) and either [(ANAT 215 and ANAT 216) or ANAT 309]. **Offering Faculty:** Faculty of Health Sciences

## REPD 473 Developmental Origins of Health And Disease Units: 3.00

REPD 473, Development Origins of Health and Disease, will cover how the early-life environment contributes to laterlife health. Four major topics will be covered: maternal exposures, maternal nutrition, infection, and pregnancy complications. Students will learn about how alterations in the embryonic and fetal environment due to these four parameters can and do contribute to the development of non-communicable diseases that persist throughout life. Students will have the opportunity to explore and consolidate the academic literature pertaining to DOHaD, as well as investigating the resources available to these populations of patients.

**Requirements:** Minimum 4th year (Level 4) standing and one of (PHAR 230/3.0; PHAR 370/3.0; PHAR 340/3.0; PHAR 380/3.0) and REPD 372/3.0.

Offering Faculty: Faculty of Health Sciences

#### REPD 499 Research Project in Reproduction and Development Units: 12.00

An examination of the development and present state of knowledge in selected research areas of Reproduction and Development. Research project involves experimental design, data collection and analysis, written report, poster presentation and oral presentation. Students will be required to attend seminars and tutorials on topics related to research.

NOTE Limited enrolment; restricted to 4th year honours; permission of the Department required. Acceptance by a supervisor required prior to registration.

NOTE Students whose research requires the care and/or handling of animals must also complete the Introductory Animal Care Course and if required the appropriate Animal Use workshops through the Office of the University Veterinarian.

LEARNING HOURS 480 (24L;48S;192Lb;168P) **Requirements:** Prerequisite Level 4 and registration in a LISC Specialization Plan and a cumulative GPA of 2.50 or higher. Exclusion ANAT 499; CANC 499; EPID 499; MICR 499; NSCI 499; PATH 499; PHAR 499; PHGY 499. **Offering Faculty:** Faculty of Arts and Science