

Course Objectives:

The objectives of the course are:-

1. To introduce the field of Reproductive Biology, its history and significance
2. To impart knowledge about anatomy and physiology of reproduction
3. To demonstrate the socio-economic issues of reproductive biology.

Course Learning Outcomes:

Upon successful completion of the course, the student will be able to:

1. **UNDERSTAND** the fundamental anatomy of male and female reproductive systems in various mammalian species
2. **ACQUIRE** knowledge about histology and physiology of the male and female reproductive systems
3. **COMPREHEND** the basic patterns and periodicity of reproductive processes in mammals
8. **ELABORATE** the socio-economic problems related to reproductive biology

Course Contents:

Pregnancy: Hormonal mechanism in fertilization, zygote transport and implantation. Placental steroid and polypeptide hormones; Recognition and maintenance of pregnancy; Maternal metabolism in gestation, Hormonal mechanism in parturition.

Lactation: Hormonal mechanism in lactation; Lactogenesis, Galactopoeisis, Milk ejection.

Reproductive Senescence: Hormonal and metabolic aspects in menopause; Mechanisms in males.

Fertility Control Mechanisms: Hormonal contraceptives; Rhythmic methods, Immunologic techniques and other fertility control procedures in women; complications in their uses; Fertility control in men and search for male contraceptive.

Teaching-Learning Strategies

Teaching will be a combination of class lectures, class discussions, and group work. Short videos /films will be shown on occasion.

Assignments

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination

Sessional Work:	25 marks
Midterm Exam:	35 marks
Final term Exam:	40 marks

Books Recommended

1. Knobil, E. and Neill, J.D., *et al.*, 1994. The Physiology of Reproduction, Vol.1and2; 2nd Ed., Raven Press, New York.
2. Wilson, J.D., Foster, D.W., Kronenberg, H.M. and Larsen, P.R., 1998. William's Textbook of Endocrinology, 9th Ed.. W.B. Saunders Company, Philadelphia.
3. Evert, B.J. and Johnson, M.H., 2000. Essential Reproduction, 5th Ed.. Blackwell Science Inc., Oxford.
4. White B, Porterfield S. Endocrine and reproductive physiology: Mosby physiology monograph series (with student consult online access). Elsevier Health Sciences; 2012 Oct 30.
5. Schillo KK. Reproductive physiology of mammals: from farm to field and beyond. Delmar Publishers; 2009.

Course Objectives:

The objectives of the course are:-

1. To introduce the field of Reproductive Biology, its history and significance
2. To impart knowledge about anatomy and physiology of reproduction
3. To demonstrate the socio-economic issues of reproductive biology.

Course Learning Outcomes:

Upon successful completion of the course, the student will be able to:

1. **UNDERSTAND** the fundamental anatomy of male and female reproductive systems in various mammalian species
2. **ACQUIRE** knowledge about histology and physiology of the male and female reproductive systems
3. **COMPREHEND** the basic patterns and periodicity of reproductive processes in mammals
8. **ELABORATE** the socio-economic problems related to reproductive biology

Course Contents:

Tests for pregnancy recognition; Experiments on role of gonads in maintenance of excessory sex gland in males and target structures in females; Study of fertility control procedures in populations.

Teaching-Learning Strategies

Teaching will be a combination of class lectures, class discussions, and group work. Short videos /films will be shown on occasion.

Assignments

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination

Sessional Work:	25 marks
Midterm Exam:	35 marks
Final term Exam:	40 marks