AGRI 2004 ANIMAL REPRODUCTION

Credit Points 10

Legacy Code 300835

Coordinator Sebastian Holmes (https://directory.westernsydney.edu.au/search/name/Sebastian Holmes/)

Description Reproduction is the origin of life. The aim of this subject is to provide students with a sound understanding of reproduction of both domestic and non domestic animals so that they can design and manage a breeding program for a species of choice. Topics will include anatomy and physiology of male and female reproductive tracts; hormonal control of reproduction; fertilisation, pregnancy, parturition and lactation and advanced reproductive technologies. These topics will be explored in a range of species across different taxonomic groups.

School Science

Discipline Animal Husbandry

Student Contribution Band HECS Band 1 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 2 subject

Pre-requisite(s) BIOS 1012 Cell Biology

Restrictions

Successful completion of 60 credit points

Assumed Knowledge

Some knowledge of biology, including basic animal anatomy, introductory animal physiology and some understanding of reproductive behaviour.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Describe a range of reproductive strategies used by domesticated animals and wildlife species
2. Examine reproductive organs systems to determine advanced reproductive technologies to be applied to breeding systems
3. Compare and contrast the principles of manipulating breeding systems using biological and environmental stimuli
4. Analyse biological tissue in the laboratory to determine appearance of normal tissue
5. Report research findings using appropriate academic writing and public speaking

Subject Content

1. Anatomy of male and female reproductive tracts
2. Endocrinology of reproductive cycles
3. Oogenesis, fertilisation
4. Parturition and lactation
5. Pregnancy loss
6. Effect of environment on reproduction
7. Manipulation of reproductive cycles
8. Captive breeding programs
9. Artificial breeding techniques including semen collection and evaluation, embryo transfer and other assisted reproductive techniques

10. Major reproductive diseases and their control
11. Comparative structure and function of male and female reproductive systems, and learn how to manipulate endocrine control of reproductive cycles. Students will work with a range of techniques, including new and emerging technologies, for modifying reproductive performance.
12. Factors affecting reproduction and common causes of reproductive failure will also be explored. Research and write professional standard academic reports.

Special Requirements

Legislative pre-requisites

All activities in the subject involving live animals must be approved by the Western Sydney University Animal Care and Ethics Committee.
All activities in the subject involving the use of animal specimens must be approved by the Western Sydney University Institutional Biosafety and Radiation Safety Committee.

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task
Report	500-1000 words	10	N	Individual
Presentation	3 minutes	15	N	Individual
Report	1500-2000 words	25	N	Individual
Essay	1500-3000 words	25	N	Individual
Final Exam	2 hours	25	N	Individual

Prescribed Texts

- The Biology of Reproduction by Giuseppe Fusco and Alessandro Minelli (1st Edition) 2019. Cambridge University Press. ISBN-13: 978-1108731713 ISBN-10: 1108731716
- Reproductive Technologies in Farm Animals by Ian R. Gordon (2nd edition) 2017. CABI ISBN-10: 1780646038 ISBN-13: 9781780646039 Link is to the 1st edition available online via the library.

Teaching Periods

Spring (2024)

Hawkesbury

On-site

Subject Contact Sebastian Holmes (https://directory.westernsydney.edu.au/search/name/Sebastian Holmes/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=AGRI2004_24-SPR_HW_1#subjects)