



UNIVERSITÀ
degli STUDI
di CATANIA

DEPARTMENT OF BIOLOGICAL, GEOLOGICAL AND
ENVIRONMENTAL SCIENCES

Master's Degree in Experimental and Applied Biology

Academic Year 2021/2022 - 1° Year - Cell-Molecular Biology

Curriculum

BIOTECNOLOGIE DELLA RIPRODUZIONE

VET/10 - 6 CFU - 2° Semester

Teaching Staff

ANTONIO SALVAGGIO

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Office Hours: martedì e giovedì 16,00-18,00

LEARNING OBJECTIVES

The objectives of the course include the knowledge the reproductive anatomy and physiology. The student will be able to apply the techniques of handling, storage of gametes and embryos of the major livestock species, the assisted reproduction techniques, sexing semen and embryos, genetic modification of animals; will be able to understand the impact on the health and welfare of the animals of the biotechnology that he has learned for zootechnical and biomedical use.

COURSE STRUCTURE

Lessons and labs.

Should teaching be carried out in mixed mode or remotely, it may be necessary to introduce changes with respect to previous statements, in line with the programme planned and outlined in the syllabus.

Learning assessment may also be carried out on line, should the conditions require it.

DETAILED COURSE CONTENT

Anatomy and physiology of male and female reproductive system. Collection and preservation of gametes. Techniques of artificial insemination in domestic animals. Technologies for genetic engineering of farm animals, and applicative implications.

TEXTBOOK INFORMATION

Hafez, B & Hafez ESE. Reproduction in farm animals, 7th Edition. Lippincott Williams & Wilkins, 2008.
ISBN 0-683-30577-8

Gordon, I. Reproductive Technologies in Farm Animals, CABI-Publishing, CAB International, Wallingford, Oxfordshire, UK, 2004. ISBN 0 85199 862 3.

Nagy Andras. Manipulating the mouse embryo: a laboratory manual. Publisher: Cold Spring Harbor, N.Y. : Cold Spring Harbor Laboratory Press, ©2003. ISBN: 0879695749 0879695919

National Research Council of the National Academies. Animal biotechnology, science based concerns. The National Academies Press 500 Fifth Street, N.W., Washington, DC 2002. ISBN 0-309-08439-3 (www.nap.edu).

Notes provided by professor
