

BIOAGRI01	COURSE TITLE: ANIMAL CELL ENGINEERING		ECTS: 4	
COORDINATOR: DOROTA CIEŚLAK		DEPARTMENT: GENETICS AND ANIMAL BREEDING		
Course Category BIOTECHNOLOGY				
VOLUME (H) 60			PERSONAL WORK (H)	
LECTURE:(H) 30	LAB (H) 30	PLACEMENT: (H)	PROJECT (H)	OTHER MODALITIES: (H)
EVALUATION:		OTHER MODALITIES:	LECTURER(S)	
EVALUATION MODALITIES				
ORAL INDIVIDUAL REPORT				
WRITTEN INDIVIDUAL REPORT				
FINAL ORAL EXAM				
FINAL WRITTEN EXAM	x			
COMMENTS OF EVALUATION:		TEACHING METHODS:		
SEMESTER: WINTER		LANGUAGE: ENGLISH		
PERIOD: 15 WEEKS		YEAR OF STUDY: FIFTH		
OBJECTIVES				
<ul style="list-style-type: none"> • oogenesis, spermatogenesis, early embryonic development, • in vitro production of mammalian embryos, • embryo and sperm sexing, transgenesis, embryo and animal cloning, biotechniques 				
CONTENTS				
<ul style="list-style-type: none"> • Gamete growth and fertilization and early embryonic development • In vitro production of mammalian embryos • Oocyte and embryo quality (factors affecting embryo survival in vitro) • Oocyte, embryo handling and manipulations (eg cell biopsy, splitting, icsi, cell fusion, enucleation) • Transgenesis (methods, efficiency, achievements) • Animal and embryo cloning (methods, efficiency, implications) • Recent achievements in embryology (the most important finding in biotechnology during the last year) • Ivf in human – chance or threat? 				
GROUP SIZE: 10		PRE-REQUIRES:		