



ADVANCED CELLULAR BIOLOGY	
Enrollment year	2017/2018
Academic year	2017/2018
Regulations	DM270
Academic discipline	BIO/06 (COMPARATIVE ANATOMY AND CYTOLOGY)
Department	DEPARTMENT OF BIOLOGY AND BIOTECHNOLOGY "LAZZARO SPALLANZANI"
Course	EXPERIMENTAL AND APPLIED BIOLOGY
Curriculum	Scienze biomediche molecolari
Year of study	1°
Period	2nd semester (01/03/2018 - 14/06/2018)
ECTS	6
Lesson hours	48 lesson hours
Language	Italian
Activity type	ORAL TEST
Teacher	ZUCCOTTI MAURIZIO (titolare) - 6 ECTS
Prerequisites	Knowledge of basic cell biology
Learning outcomes	The main objective of this course is to give students the knowledge of the cytological and molecular aspects that regulate cell activity during the several steps that lead to its differentiation from a stem status, and at the time of the establishment of a cell-to-cell relationship during tissue formation.
Course contents	The course will give the knowledge necessary to the understanding of the signalling pathways, genetic and epigenetic mechanisms (including those of environmental origin) that regulate the maintenance of an undifferentiated status, the processes of cell differentiation and the relationship among cells within examples of tissue contexts. These processes will be observed both in normal and pathological conditions or following experimental induction.

Teaching methods	Oral lessons with access to all the slides projected and to pdf files of papers on some of the specific subjects discussed. Before each new lesson, the teacher will first summarise then check whether the previous topics have been well understood through an interactive discussion with the students.
Reccomended or required readings	<p>Cell Biology, Edito da Thomas D. Pollard, William C. Earnshaw, Jennifer Lippincott-Schwartz, Graham Johnson. Elsevier, 2016.</p> <p>Lodish et al. Biologia Molecolare della Cellula. Zanichelli Editore.</p> <p>Alberts et al., Biologia Molecolare della Cellula. Zanichelli Editore.</p>
Assessment methods	Oral exam
Further information	No other content
Sustainable development goals - Agenda 2030	<a href="#">\$ibl legenda sviluppo sostenibile</a>