



PHARMACOLOGICAL THERAPY ELEMENTS

Enrollment year	2019/2020
Academic year	2021/2022
Regulations	DM270
Academic discipline	BIO/14 (PHARMACOLOGY)
Department	DEPARTMENT OF BIOLOGY AND BIOTECHNOLOGY "LAZZARO SPALLANZANI"
Course	BIOTECHNOLOGY
Curriculum	PERCORSO COMUNE
Year of study	3°
Period	2nd semester (01/03/2022 - 14/06/2022)
ECTS	6
Lesson hours	48 lesson hours
Language	Italian
Activity type	WRITTEN TEST
Teacher	PAOLILLO MAYRA (titolare) - 3 ECTS AMADIO MARIALAURA - 3 ECTS
Prerequisites	none
Learning outcomes	The aim of the course is to study the types and the clinical use of these molecules.
Course contents	<p>"New pharmacological therapies for cancer": The development of novel effective chemotherapeutic drugs requires the knowledge of the main principles relative to molecular and cellular pharmacology, allowing to find out appropriate therapeutic targets, that are molecules or pathways relevant for the etiopathogenesis of tumors.</p> <p>Biology of tumors, preclinical and clinical research for drug discovery and development; protein kinases; membrane receptors and transduction signals; intracellular kinases and cell cycles-related enzymes; apoptosis; main novel targeted therapies; drugs targeting</p>

	<p>angiogenesis.</p> <p>“Monoclonal antibodies”: 4 Basic elements on the immune system functions, innate immunity, acquired immunity, humoral immunity and antibodies production.</p> <p>Methods to produce monoclonal antibodies, from mouse to human antibodies. Types of monoclonal antibodies in the clinic, targets and limits of the therapies.</p>
Teaching methods	The course is based on lectures provided by the instructor. No practical exams. No in itinere tests.
Reccomended or required readings	The slides of the course will be available on KIRO platform.
Assessment methods	<p>Final written exam at the end of the lessons.</p> <p>“Monoclonal Antibodies”: The examination consists of both multiple choice tests and open questions.</p> <p>“New pharmacological therapies for cancer”: The examination consists of both multiple choice tests and open questions on representative drugs/targets treated during teaching sessions. Knowledge of the general context and main features of a given therapeutic target and/or drug, will be required. The use of the appropriate language will be also evaluated.</p> <p>If the students answer correctly to both multiple choice tests and open questions will get the excellence (31).</p> <p>Note that the grade of “New pharmacological therapies for cancer” should be registered together with that one of “Monoclonal Antibodies”, as a unitary course on “Pharmacological therapy elements”. The final grade will be equal to the mathematical mean of the two.</p>
Further information	<p>Final written exam at the end of the lessons.</p> <p>“Monoclonal Antibodies”: The examination consists of both multiple choice tests and open questions.</p> <p>“New pharmacological therapies for cancer”: The examination consists of both multiple choice tests and open questions on representative drugs/targets treated during teaching sessions. Knowledge of the general context and main features of a given therapeutic target and/or drug, will be required. The use of the appropriate language will be also evaluated.</p> <p>If the students answer correctly to both multiple choice tests and open questions will get the excellence (31).</p> <p>Note that the grade of “New pharmacological therapies for cancer” should be registered together with that one of “Monoclonal Antibodies”, as a unitary course on “Pharmacological therapy elements”. The final grade will be equal to the mathematical mean of the two.</p>
Sustainable development goals - Agenda 2030	\$lbl_legenda_sviluppo_sostenibile