UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Biologia Applicata

2627-1-K0101D004-K0101D017M

Aims

The purpose of the course is to present the most recent advances in applied biology research. The course, that is part of the Methodology of Research teaching, aims also to discuss examples of research and to evaluate methods, results and main implications for nursing and midwifery research and practice.

Knowledge and Understanding – By the end of the course, the student will have acquired advanced knowledge and critical understanding of preclinical and clinical tools in translational medicine based on cell therapy, immunotherapy, and gene therapy.

Applying Knowledge and Understanding – By the end of the course, the student will be able to interpret experiments and clinical trials in oncohematology, understand how preclinical results can be translated into innovative clinical strategies, and apply the acquired translational concepts to the design and development of new targeted therapies.

Judgement Autonomy – By the end of the course, the student will be able to critically evaluate scientific literature, interpret and comment on data from clinical sources and immunotherapy/gene therapy trials with a critical mindset, and formulate original hypotheses in the field of translational research.

Communication Skills – By the end of the course, the student will have acquired appropriate terminology to clearly and coherently present scientific data to specialist audiences. They will also be able to effectively communicate research findings in clinical settings and engage in discussions on the proposed topics.

Learning Skills – By the end of the course, the student will have developed the ability to independently stay updated on the latest innovations in cell and gene therapy approaches as reported in relevant scientific journals, thereby expanding their professional and scientific competencies.

Contents

To know the recent advances of research in the specific clinical area.

To identify implications for nursing and midwifery research.

Detailed program

Recent research developments in the field of applied biology (use of multipotent and pluripotent stem cells derived from bone marrow or cord blood in preclinical and clinical approaches to cell and gene therapy; use of CAR-T cells in immunotherapy approaches in the oncohematology area)

Methods and tools adopted in applied biology research.

Implications for research, even nursing and midwifery research, in the field of applied biology.

Prerequisites

Defined by the Degree Regulation.

Teaching form

Frontal Lectures and in-class discussion.

Textbook and teaching resource

No textbooks are used; instead, research articles selected by the teacher are discussed during the lectures.

Semester

First year, second semester

Assessment method

The examination is not for the single module but it is an integrated examination for the whole course, as described in details in the Syllabus of the Course.

Office hours

Agreed with teacher by e-mail (marta.serafini@unimib.it)

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY