**Testi del Syllabus**

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### Testi in italiano

**Lingua insegnamento**

English

**Contenuti (Dipl.Sup.)**

Applied Neurosciences is a short professionalizing course that will introduce students to the basics of the industrial process leading to the development of new therapies for neurological diseases. At the same time, the course is fundamental to prepare the students to deal with challenges of their future working experiences. Lectures will be held by leading specialists from pharmaceutical, biotechnological and nutraceutical industries and experts in technology transfer from the idea to a product. Former students of the master will share their experience in a working environment in Italy and other Countries. During the course some class exercises will be carried out which will simulate typical experiences at the working place.

**Testi di riferimento**


**Obiettivi formativi**

- Knowledge and understanding of the process for the development of new drugs for diseases of the nervous system and the differences between small molecules, biologics, phytopharmaceuticals and nutraceuticals.
- Knowledge and understanding applied to effective communication within a work team and a personal presentation appropriate to the world of work.
- Independent judgment in the definition and evaluation within a work team of a project for the development of new therapies or diagnostics.
- Communication skills in exposing one's own skills and in enhancing the results of one's work team;
- Ability to learn quickly and under competitive pressure.

**Prerequisiti**

Basic knowledge in cellular neurobiology, neurophysiology, neuroanatomy and neuropharmacology.

**Metodi didattici**

Frontal lectures with power point slide projections and short movies.

Conventional as well as "non-conventional" group and individual exercises to be done in the class are included in the course.

If possible, an on-site visit of a business incubator and R&D laboratory at a pharmaceutical/biotech company will be carried out.

**Altre informazioni**

The course is an important opportunity to have a clearer vision of one's professional future.

Furthermore, it will be possible to receive information on internships and traineeships in the industries.

Any changes, necessary to ensure the application of the safety protocols related to the COVID19 emergency, will be communicated on the Course website.

**Modalità di verifica dell'apprendimento**

The final evaluation will be assigned on the basis of the performance, expressed as fail, sufficient, good, very good, excellent, obtained in three exercises to be carried out in class, one of which is individual and two in group.

**Programma esteso**

The course is organized every year during the second week of January and lectures are hold by ~12-15 highly qualified experts from industries operating mainly in Italy and Europe. Topics of the lectures are updated every year and generally are subdivided in 5 days of seminars dealing with: DAY 1: Target identification & in vitro drug testing at pharmaceutical companies. DAY 2) The various phases of clinical trials with treatments for the nervous system. DAY 3) Developing innovative therapeutic approaches at biotech companies. DAY4) Regulatory affairs and technology transfer. DAY 5) What means creating your own company? – On site visits at Companies or at Area di Ricerca are possible.

**Obiettivi Agenda 2030 per lo sviluppo sostenibile**

This course explores topics closely related to one or more goals of the United Nations 2030 Agenda for Sustainable Development (SDGs). Specifically,
N.3 Health and wellbeing  
N.4 Education of quality

**Obiettivi per lo sviluppo sostenibile**

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<td>Salute e benessere</td>
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<td>Istruzione di qualità</td>
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