
Testi del Syllabus

Resp. Did. **MANFIOLETTI GUIDALBERTO** **Matricola: 004082**

Docente **MANFIOLETTI GUIDALBERTO, 6 CFU**

Anno offerta: **2021/2022**

Insegnamento: **855SM - ESPRESSIONE GENICA**

Corso di studio: **SM53 - GENOMICA FUNZIONALE**

Anno regolamento: **2020**

CFU: **6**

Settore: **BIO/11**

Tipo Attività: **C - Affine/Integrativa**

Anno corso: **2**

Periodo: **Primo Semestre**

Sede: **TRIESTE**

Testi in italiano

Lingua insegnamento INGLESE

Contenuti (Dipl.Sup.) The course is organized in two parts:
I PART. One week intensive course on regulation of gene expression. The course is part of the Double Diploma programme with the University of Paris.
II PART. 1. How a Scientific paper is organized. Several papers will be discussed in this section. 2. RNA analyses. Extraction, purification and analysis of RNA from eukaryotic cells. 3. Protein-DNA interactions. 4. Eukaryotic RNA polymerases and promoters. 5. Eukaryotic general transcription factors. 6. Eukaryotic transcriptional activators. 7. Chromatin structure and its effects on transcription. 8. Post-transcriptional processes.

Testi di riferimento R. Weaver - Molecular biology - McGraw-Hill. Selected scientific papers and other didactical material will be provided through the Moodle platform.

Obiettivi formativi Knowledge and understanding.
Understand mechanisms responsible for the regulation of gene expression in Eukaryotic organisms at the transcriptional and post-transcriptional level. Acquire the theoretical methodology used in gene expression studies.

Prerequisiti Basic concepts in Biochemistry, Molecular and cellular Biology.

Metodi didattici	Frontal lessons: 3 ECTS (24 hours). Others (seminars, visits, etc.) 3 ECTS (24hours).
Altre informazioni	Attendance of Part I is compulsory that one of Part II highly recommended. Students not able to attend the course should contact the teacher in advance. Slides of the course, papers and protocols discussed during the course can be found at the Moodle website (password needed).
Modalità di verifica dell'apprendimento	Written exam. A written test is at the end of the "Erasmus week" (part I) and is the discussion of a scientific paper. The second test (part II) is based on three open questions and is given at the end of the course (look at the calendar of exams). Any changes to the methods described here, which may be necessary to ensure the application of the security protocols related to the COVID19 emergency, will be communicated on the website of the Department, the Degree Program and the course.
Programma esteso	The course is organized in two parts: I PART. One week intensive course on regulation of gene expression. The course is organized in seminars given by experts, professors of the University of Trieste, Udine, SISSA, ICGEB and visiting professors. The course (Erasmus week) is part of the Double Diploma programme with the University of Paris. French students will be also present. The attendance is compulsory. II PART. 1. How a Scientific paper is organized. Several papers will be discussed in this section. 2. RNA analyses. Extraction, purification and analysis of RNA from eukaryotic cells. 3. Protein-DNA interactions. 4. Eukaryotic RNA polymerases and promoters. 5. Eukaryotic general transcription factors. 6. Eukaryotic transcriptional activators. 7. Chromatin structure and its effects on transcription. 8. Post-transcriptional processes.



Testi in inglese

	English
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