
SC

BIOL2137 **Génétique moléculaire**

[30h+15h exercises] 3.5 credits

This course is taught in the 1st semester

Teacher(s): Jean Delcour, Bernard Hallet
Language: french
Level: 2nd cycle course

Aims

Study of the genes and the genome as molecular entities that we describe and try so hard to understand their replication, transcription, and translation.

CONCERNS: mandatory for BIOL21 (partim 30-0 in BIOL21b) students.

Main themes

- 1/ General problematics of molecular genetics
- 2/ Structure and organization of the genome
- 3/ Translation system
- 4/ Initiation of translation in procaryotes
- 5/ Initiation of translation in eucaryotes
- 6/ Genetic code
- 7/ Translation regulation
- 8/ Transcription system in procaryotes
- 9/ Initiation of transcription in procaryotes
- 10/ Regulation of transcription in procaryotes
- 11/ Transcription system in eucaryotes
- 12/ Initiation of transcription in eucaryotes
- 13/ Regulation of transcription in eucaryotes
- 14/ Post-transcriptionnal maturation
- 15/ Replication system
- 16/ Replication genetics in procaryotes
- 17/ Repairing DNA
- 18/ Recombination
- 19/ Transposition in procaryotes
- 20/ Transposition in eucaryotes

Other credits in programs

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| BIOL21/A | Première licence en sciences biologiques (Biologie moléculaire, cellulaire et humaine) | (3.5 credits) | Mandatory |
| CHIM22 | Deuxième licence en sciences chimiques | (3.5 credits) | |