

- Faculté des sciences
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Microbial ecology (3BL2238)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en biologie	Cours: 30 pg	controle continu: 1	3

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

Période d'enseignement:

- Semestre Printemps

Equipe enseignante:

Pilar Junier

Objectifs:

To establish a link between metabolisms and physiology and microbial habitats. The current methods to study microbial communities in environmental samples, as well as and the limitations of those are presented and discussed during the lectures.

Contenu:

The content of this course includes the following topics:

- 1- Methods to study microbial communities and current limitations.
- 2- Microbial habitats and microbial diversity.
- 3- Frontiers of current knowledge and perspectives.

Forme de l'évaluation:

For the overall evaluation the work conducted during the semester, as well as a final report, will be evaluated in the following way:

1. Presence to the lectures: 10%
2. Contribution to the production of summary for each topic -specific individual assignment-: 20%
3. Active contribution to literature research: 20%
4. Presentations during lectures -presentation of three key aspects of the topic-: 20%
5. Final report: 30%

The final report consists of an extended essay on one of the topics studied in class developing one of the questions discussed. For the essay the student should focus on research articles not studied during the lectures.

If a student fails to obtain a "pass" grade, a comprehensive review (10 pages and at least 20 scientific references of research articles) in one of the topics will have to be handled on Friday the week immediately after the end of the semester.

Documentation:

1)Environmental microbiology, from genomes to biogeochemistry. E. Madsen. 2008. Blackwell publishing. 2)Microbial life. J. T. Stanley, R. P. Gunsalus, S. Lory, J. J. Perry. 2nd edition. Sinauer Associates Inc. And specialised articles (given during the lectures).

Pré-requis:

Basic concepts in microbiology of a Bachelor level

Forme de l'enseignement:

Lectures, seminars and discussion of scientific articles