

- Faculté des sciences
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**Bioinformatics tools (3BL2194)**

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master en biologie</b>	<b>Cours: 3 ph</b>	<b>contrôle continu: 1</b>	<b>3</b>

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

**Période d'enseignement:**

- Semestre Automne

**Equipe enseignante:**

Nikolai Ivanov, Thomas Junier, Pilar Junier (coordinator)  
 Assistants: Fabio Palmieri, Mathilda Hayoz

**Objectifs:**

To acquire an understanding of some topics in bioinformatics and to learn to use algorithms and analysis tools.

**Contenu:**

The content of this course includes the following topics:

- 1- Introduction to Unix
- 2- Sequencing analysis
- 3- Genome assembly
- 4- Metagenomics
- 5- Epigenetics

**Forme de l'évaluation:**

Exercises to be graded during each practical lecture.

If the final mark obtained is insufficient, the student has to hand in two critical essays on the topics developed, at most two weeks after the end of the class (09.12.2016).

**Documentation:**

Bioinformatics for Biologist. Edited by Pavel Pevzner and Ron Shamir. Cambridge University Press. 2011.

**Pré-requis:**

Reading of scripts before lectures and exercises.

**Forme de l'enseignement:**

Lectures and computer lab. Participation to the computer lab is mandatory (grading during the practical).