

# UE Bacteriology



- > **Langue(s) d'enseignement:** Anglais
- > **Ouvert aux étudiants en échange:** Oui

## Présentation

### Description

#### Course outline

Thematic of the lectures (25.5h):

- Structure of bacterial chromosomes (3h)
- Regulation of bacterial gene expression and bacterial genomics (sigma factors, sRNA; 6h)
- Bacterial cytoskeleton (1,5h)
- Global regulation of bacterial transcription (DNA topology and stringent response; 9h)
- Bacterial diversity and the new tree of life (3h)
- Plasticity of bacterial genomes (mobile genetic elements; 3h)

Tutorials (18h= 12x1.5h):

Before each session, students have to read one scientific paper on topics related to the lectures and its content (methodologies, results) is then discussed during the 1.5h tutorial.

## Format of the course

<i>Activities</i>	<i>Hours</i>	<i>Percentage</i>
<i>Lectures</i>	25.5	30%
<i>Tutorials and discussions</i>	18	20%
<i>Lab sessions</i>		
<i>Estimated work load at home</i>	<i>About 45h</i>	50%
<i>Total</i>	90	100%

## Exam requirements

<i>Nature of the exams</i>	<i>Mid-term (Number of hours, % of the final grade)</i>	<i>Final (Number of hours, % of the final grade)</i>	<i>Second session</i>
<i>Written exam</i>		2h, 70%	2h, 70%
<i>Oral exam</i>	30 min, 20%		
<i>Research project</i>			
<i>Synthesis</i>	10%		
<i>Practicals: report</i>			

Oral exam: students have to prepare an oral synthesis of one scientific paper.

Synthesis: students have to prepare a written synthesis of one scientific paper.

Final exam: students have to analyse figures from one or two scientific papers.

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## Heures d'enseignement

UE Bacteriology - CM	CM	27h
UE Bacteriology - TD	TD	18h

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## Pré-requis recommandés

**Text-book knowledge in bacteriology**

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## Compétences visées

- Targeted skills:

- Knowledge in bacterial genomics, molecular genetics and state-of-the-art genomic technologies.
- Knowledge in bacterial diversity.
- Ability to analyze biological data from published scientific manuscripts.

## Infos pratiques

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### Contacts

Responsable pédagogique

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### Lieu(x) ville

› Grenoble

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### Campus

› Grenoble - Domaine universitaire