

UE Bacteriology



- > **Teaching language(s):** English
- > **Open to exchange students:** No

Presentation

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

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>		<i>2h, 70%</i>	<i>2h, 70%</i>
<i>Oral exam</i>	<i>30 min, 20%</i>		
<i>Research project</i>			
<i>Synthesis</i>	<i>10%</i>		
<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.

Course parts

UE Bacteriology - CM

Lectures (CM)

27h

UE Bacteriology - TD

Tutorials (TD)

18h

Recommended prerequisites

Text-book knowledge in bacteriology

Skills

- 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.

Useful info

Contacts

Program director

Thomas Hindré

✉ Thomas.Hindre@univ-grenoble-alpes.fr

Campus

› [Grenoble - Saint-Martin d'Hères](#)