

## Course Title: Principles of Molecular and Cellular Biology

### Contact information:

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### Other teachers

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### Course Book

Essential Cell Biology, 2<sup>nd</sup> Edition.

**Authors:** Bruce Alberts, Dennis Bray, Karen Hopkin, Alexander Johnson, Julian Lewis, Martin Raff, Keith Roberts and Peter Walter.

### Assignments

The presence at all courses and laboratory courses is mandatory.

### Course

Read the book chapters corresponding to the lecture **before** the lecture.

There will be one written « midterm » exam, consisting of a problem set that you will treat for 30 minutes during one of the courses. The subject of this exam includes all lectures up to this date. The final, written exam will be on the contents of the entire course.

### Laboratory course

There are seven half-day sessions. At the end of each session (or the subsequent half-day session), you will hand in a post-lab report on this session. The average of these four grades will constitute your grade of the laboratory course.

### Grading

The course grade will be based upon: the midterm exam, the grade for the laboratory course, and the final exam.

Your final grade will be made of:

Midterm exam: 20 %

Laboratory course: 30 %

Final exam: 50 %

### Course schedule

Week	Time	Room	Date	Chapter	Teacher
2	15:15- 16:45	D104	Monday, 11 <sup>th</sup> January	1, 2 Cells and Cell components	Hans
2	13:30 –15:00	B314	Thursday, 14 <sup>th</sup> January	4 Proteins	Hans
3	15:15- 16:45	D002	Monday, 18 <sup>th</sup> January	5 DNA, chromosomes	Denis
4	15:15- 16:45	D002	Monday, 25 <sup>th</sup> January	7 DNA to protein	Denis
4	8:00 – 9:30	D102	Thursday, 28 <sup>th</sup> January	6 Replication	Fayçal
5	15:15- 16:45	D002	Monday, 1 <sup>st</sup> February	9 Evolution	Denis
5	8:00 – 9:30	D102	Thursday, 4 <sup>th</sup> February	8 Gene expression	Fayçal
6	15:15- 16:45	B007	Monday, 8 <sup>th</sup> February	10 Genetic engineering (Part 1)	Fayçal
6	8:00 – 9:30	D102	Thursday, 11 <sup>th</sup> February	10 Genetic engineering (Part 2)	Fayçal
8	15:15- 16:45	B007	Monday, 15 <sup>th</sup> February	11 Membrane structure	Hans
8	8:00 – 9:30	D102	Thursday, 18 <sup>th</sup> February	12 Membrane transport	Hans
9	15:15- 16:45	D002	Monday, 29 <sup>th</sup> February	3, 13 Catalysis, Energy, Food	Hans
9	8:00 – 9:30	D102	Thursday, 3 <sup>th</sup> March	Midterm Exam	Fayçal
10	15:15- 16:45	B007	Monday, 7 <sup>th</sup> March	14 Mitochondria Chloroplasts	Denis
10	9:00 – 13:00	C219**	Tuesday, 8 <sup>th</sup> March	Lab course 1	Stephan
10	9:00 – 13:00	C219**	Thursday, 10 <sup>th</sup> March	Lab course 2	Stephan
11	15:15- 16:45	B007	Monday, 14 <sup>th</sup> March	15 Compartments, Transport	Hans
11	8:30 – 12:30	C219**	Tuesday, 15 <sup>th</sup> March	Lab course 3	Fayçal
11	8:30 – 12:30	C219**	Thursday, 17 <sup>th</sup> March	Lab course 4	Fayçal
12	15:15- 16:45	B007	Monday, 21 <sup>st</sup> March	16 Cell communication	Marc
12	8:30 – 12:30	C219**	Tuesday, 22 <sup>sd</sup> March	Lab course 5	Fayçal
12	8:30 – 12:30	C219**	Thursday, 24 <sup>th</sup> March	Lab course 6	Fayçal
13	8:30 – 12:30	C219**	Tuesday, 29 <sup>th</sup> March	Lab course 7	Hans
13	8:00 – 9:30	D102	Thursday, 31 <sup>st</sup> March	17 Cytoskeleton	Marc
14	15:15- 16:45	B007	Monday, 4 <sup>th</sup> April	18 Cell cycle	Denis
14	8:00 – 9:30	D102	Thursday, 7 <sup>th</sup> April	19 Cell division	Denis
15	15:15- 16:45	B007	Monday, 11 <sup>th</sup> April	20 Genetics, Meiosis, Heredity	Fayçal
15	8:00 – 9:30	D102	Thursday, 14 <sup>th</sup> April	21 Cancer-Tissues-Stem Cells	Fayçal

- C219\*\* : Buliding C, UFR of Biology

