

SCHEDULE OF LECTURES AND EXAMINATIONS

#	Lecturer	Chapt	Lecture Topics
1	VOURC'H	1	Evolution and model systems
2	VOURC'H	2-3	Cellular macromolecules, Metabolism and synthesis
3	VOURC'H	4	Genes & DNA
4	VOURC'H	4	Gene Expression & Recombinant DNA Methodologies
5	VOURC'H	5	Complexity & Sequences of Complete Genomes
6	VOURC'H	5	Chromatin, Bioinformatics and Systems Biology
7	VOURC'H	6	DNA Replication
8	VOURC'H	6	DNA Repair and Rearrangements
9	VOURC'H	7	RNA Synthesis (transcription)
	EXAM 1	1-6	Lectures 1-8
10	VOURC'H	7	Eukaryote transcription and processing
11	BENHAROUGA	8	Protein Synthesis (translation)
12	BENHAROUGA	8	Protein Processing, regulation and Degradation
13	VOURC'H	9	The Nucleus and the nuclear envelope
14	BLOCK	10	The Secretory pathway
15	BLOCK	10	Cellular Trafficking: the ER, Golgi & beyond
16	BLOCK	11	Mitochondrial function & Cellular energy
	EXAM 2	7-11	Lectures 8-16
17	BLOCK	12	Actin Cytoskeleton & cell movement and migration
18	BLOCK	12	Intermediate Filaments & the Tubulin Cytoskeleton
19	BLOCK	13	The plasma membrane and transport across it
20	BLOCK	14	The Extracellular Matrix & Cell Interactions

#	Lecturer	Chapt	Lecture Topics
21	BLOCK	15	Cell Signaling: Mechanisms & Signal Transduction
22	VOURC'H	16	Signal Transduction & Apoptosis
23	VOURC'H	17	The Cell Cycle & Stem Cells
24	VOURC'H	18	Cancer, Tumor Viruses, Oncogenes & Tumor Suppressors
	EXAM 3	12-	Lectures 17-24
	FINAL EXAM		

Lecturers : Pr Claire Vourc'h – Pr Marc Block- Dr Mohamed Benharouga.

6 additional lecture are given (correction of the tests, discussion on development of specific aspects of the lecture...).

FINAL EXAMINATIONS

The three intermediate test count for 50% of the final grade (only the two best test are considered)

The Final exam counts for 50% of the grade.

PLAN YOUR WINTER BREAK TRAVEL ACCORDINGLY AS EXAM TIMES CANNOT BE CHANGED

The **GOALS OF THE COURSE** are an understanding of the fundamental principles of cell and molecular biology. This field is not only one of the most rapidly moving areas of the life sciences, but also one that has a major impact on all of our lives because of its central role in biotechnology and medicine. We therefore hope that students will not only learn the basic mechanisms that govern the behavior of cells, but also come to understand the experimental nature of contemporary research in this area and begin to appreciate the ways in which progress in understanding cells is being made.

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