

Cell Biology-Biol200, section 104

Instructors: Dr. Ljerka Kunst (Units 1-4); Dr. Lacey Samuels (Units 5-8), Botany Department, UBC
To email the instructors, use Vista-" Mail" for personal matters; "Bulletin Board" for course content.

Lectures: MWF, 3 PM, Scarfe 100, for schedule see other side of this sheet. Please feel free to speak up if we say something that you don't agree with or makes you uncomfortable. We appreciate all feedback from you (speak to us after class, email or post on bulletin board). Please be considerate of other students: turn off your cell phone and keep talking to a minimum.

Office Hours: Dr. Kunst: Monday 4-5 PM, Wednesday 4-5 PM; room 2237 Biosciences Building
Dr. Samuels: Monday 4-5 PM, Tuesday 9:30-11 AM; room 3531, Biosciences Building.

Recommended but not required book: *Essential Cell Biology*, 3rd edition (2009) by Alberts *et al.*, Garland Science.

Units: This course consists of 8 units. Each unit has learning objectives, lectures, review questions and problems. After each unit, there will be a post-test in the tutorial.

Grades:

Midterm	22%	60 minutes – October 20, 2011. 7:00 - 8:00 pm.
Final	50%	2.5 hr during the exam period.
Tutorial	25%	Unit post-tests and your writing assignment for the course.
Participation	3%	The participation mark consists of i>Clicker participation.

Clickers: If you use your clicker in ≥ 30 classes, you get all 3 marks, in 25-29 classes, you get 2 marks, in 20-24 classes, you get 1 mark, if less than 20 classes, 0 marks. Clickers are registered to individual students IDs. Do not ask another person to use your i>Clicker in class and do not use another student's. Misuse will result in 0 marks and you will be reported for academic misconduct.

Course Website- www.vista.ubc.ca

- This is a web-enhanced course that provides extensive on-line resources.
- For Vista help, email Angela Lam, her address is ang.dms@gmail.com.

Mandatory Tutorial

- The purpose of the tutorial is to support your learning by giving you feedback throughout the term in a smaller group environment. This will include use of post-tests and an essay.
- Course coordinator-Liane Chen (lchen@zoology.ubc.ca)
- Students with conflict problems or still not in a tutorial **MUST** contact Liane Chen and register for TW1 (tutorial waiting list).
- Students who took the tutorial in 2010 and obtained a mark of 60% or greater may be exempt from taking the tutorial. They should contact Liane Chen.

Policies:

- Your marks for each of the four components, participation, tutorial grade, midterm exam and final exam will be counted; No grades will be dropped.
- You may bring a single page information sheet (handwritten, double-sided, 8.5x11") to the midterm and to the final. These sheets will be handed in with the exam.
- Both midterm and final exams will contain short answer, problem solving and essay questions.
- A student must pass the lecture component to pass the course. The maximum grade obtainable by students failing the lecture portion of the course is 45%.
- If you miss the final exam you must apply for a deferred exam through the Dean's Office of your Faculty.

BIOLOGY 200-SECTION 104

Date	Unit	Lecture Topics	Tutorial Week
W Sep 7	Unit 1 - Introduction	Lecture 1: Course organization, Cell	No tutorial this week
F Sep 9		Lecture 2: Microscopy-live cell imaging/LM	
M Sept 12		Lecture 3: Microscopy- electron microscopy	Tutorial 1 – Microscopy. Thesis statements exercise.
W Sep 14	Unit 2 – Biological Membranes	Lecture 4: Lipids and lipid bilayers	
F Sep 16		Lecture 5: Membrane properties	
M Sep 19		Lecture 6: Membrane proteins	Tutorial 2 –Unit 1 post-test. Assign Essays.
W Sept 21		Lecture 7: Membrane function	
F Sep 23		Lecture 8: Plasma membrane	
M Sep 26	Unit 3 – The Nucleus	Lecture 9: Nuclear structure	Tutorial 3 –problem solving. Assign reading assignment.
W Sept 28		Lecture 10: Nuclear transport	
F Sept 30		Lecture 11: DNA structure	
M Oct 3		Lecture 12: Chromatin and histones	Tutorial 4 –Unit 2 post-test
W Oct 5		Lecture 13: Chromatin and Chromosomes	
F Oct 7	Unit 4 –Gene to Protein	Lecture 14: Transcription	
M Oct 10		No Class-Thanksgiving*	Tutorial 5 –Unit 3 post-test
W Oct 12		Lecture 15: RNA processing	* Monday tutorials will be held on Mon Oct 17
F Oct 14		Lecture 16: Translation	
M Oct 17	Unit 5 – Endomembranes	Lecture 17: Protein targeting	No Tutorial-midterm week
W Oct 19		Lecture 18: ER structure	
Th Oct 20	MIDTERM EXAM-7 PM	Covers Units 1-4	
F Oct 21		Lecture 19: Vesicle traffic	
M Oct 24		Lecture 20: Golgi structure, glycosylation	Tutorial 6 – Reading assignment due. In-class assignment.
W Oct 26		Lecture 21: Secretion, exocytosis	
F Oct 28		Lecture 22: Endocytosis and PM turnover	
M Oct 31		Lecture 23: Lysosomes and cellular digestion	Tutorial 7 – Problem solving. Essay due
W Nov 2	Unit 6 – Mitochondria and Chloroplasts	Lecture 24: Endosymbiosis	
F Nov 4		Lecture 25: Mitochondria	
M Nov 7		Lecture 26: ATP generation	No tutorials - Remembrance Day Week
W Nov 9		Lecture 27: Chloroplasts	
F Nov 11	NO CLASS	REMEMBRANCE DAY	
M Nov 14	Unit 7 - Cytoskeleton	Lecture 28: Cytoskeleton-IF	Tutorial 8-Problem-solving or essay development.
W Nov 16		Lecture 29: Microtubule dynamics	
F Nov 18		Lecture 30: Microtubules in cells	
M Nov 21		Lecture 31: Microfilaments	Tutorial 9-Unit 5/6 post-test
W Nov 23		Lecture 32: Microfilaments and motors	
F Nov 25	Unit 8 – Cell Cycle	Lecture 33: Cell cycle phases	

M Nov 28		Lecture 34: Cell cycle control	Tutorial10 –Unit 7 post-test. Problem-solving or essay development.
W Nov 30		Lecture 35: Cyclin and kinases	
F Dec 2	Last Day of class	Lecture 36: Mitosis	