

BISC 502a: Maintaining and transmitting genetic information Fall 2019

Description and enrollment This course is a **graduate** level survey of molecular biology and genetics focused on how information is stored and transmitted in the cell with particular emphasis on experimental methods and logic. This course is designed for graduate students in the molecular and computational biology PhD programs. Graduate students in related fields with a suitable background in biological sciences may also be admitted at the discretion of the faculty. This course assumes familiarity with molecular biology principles and methods. It is not appropriate for undergraduates or non-science students. *This syllabus is subject to change!* **Class meets: MW 2-4 pm in RRI301**

Format and materials. This course will be taught from the primary literature in a mixed format of lectures and journal clubs. Each module will include an exam, problem set, or other evaluation of that material (50 pts). Resources and review articles will be uploaded to Blackboard (blackboard.usc.edu). Background reading in any general Genetics, Cell Biology, or Molecular Biology textbook may be helpful.

Requirements All students are expected to attend lecture. Additional material will be provided on Blackboard (<http://blackboard.usc.edu>). Students are expected to monitor the Blackboard site for course announcements and new materials.

Instructors:

Week	Date		
1	26 Aug	Ehrenreich	Module 1: Mendelian genetics
	28 Aug		
2	2 Sept	HOLIDAY	
	4 Sept	CANCELLED	
3	9 Sept		
	11 Sept		
4	16 Sept	exam	
	18 Sept	Chiolo	Module 2: Chromosomes, chromatin, DSB repair
5	23 Sept		
	25 Sept		
6	30 Sept		
	2 Oct		
7	7 Oct	exam	
	9 Oct	Aparicio	Module 3: Cell cycle, DNA replication
8	14 Oct		
	16 Oct		
9	21 Oct		
	23 Oct	exam	
10	28 Oct	Goodman	Module 4: Mutagenesis and repair
	30 Oct		
11	4 Nov		
	6 Nov		
12	11 Nov	exam	
	13 Nov	Arnheim	Module 5: Human genetics
13	18 Nov		
	20 Nov		
14	25 Nov		
	27 Nov	HOLIDAY	
15	2 Dec		
Final	4 Dec	exam (non-cumulative)	

Irene Chiolo	Assistant Professor	chiolo@usc.edu (Couse director for 2019)
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Other Policies:

1. Exam dates are firm. If a student misses an exam due to a true emergency (with an acceptable written excuse; written information concerning a death in the family must be provided), we MAY schedule a make-up exam, or at our discretion MAY permit the use of the average of other exams in determining the course grade. No one will be admitted to an exam after the first student has left the exam.

2. Regrading of exams will be done only by the professor who wrote the question. Regrading can only be done within one week of the day the exam is initially returned to the class, and will only be considered for exams written in ink.

3. No special assignments for extra credit are given.

4. Final exams will be kept in Dr. Chiolo's office for the required period.

5. Academic integrity policies of the university will be strictly followed. Infractions can result in severe penalties. Students are expected to familiarize themselves with the USC standards for academic integrity, as described in the <http://www.usc.edu/student-affairs/SJACS/docs/GradIntegrity.pdf> .

6. It may be necessary to make some adjustments in the syllabus during the semester. Students are responsible for monitoring materials on Blackboard.

7. Disability: Students requesting academic accommodations based on a disability are required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP when adequate documentation is filed. Please be sure the letter is delivered to Dr. Chiolo as early in the semester as possible. DSP is open Mon-Fri, 8:30-5:00. The office is in Student Union 301 and their phone number is 740-0776.