

Textbook: *Molecular Genetics of Bacteria* 4th Edition
by Snyder, Peters, Henkin, & Champness
Electronic version on Canvas

Course Outline and Textbook Readings:

DNA structure and replication	Pages 13-27, 31-34, 43-50, 53-62
DNA mutagenesis and repair	Pages 125-130, 138-153, 433-453
Transposition and recombination	Pages 361-377, 382-398, 403-422, 454-466
Transcription	Pages 67-84
Translation	Pages 85-101
Attenuation and riboswitches	Pages 497-505
Transcription regulation	Pages 471-496
Catabolite and global regulation	Pages 525-538, 541-547, 554-562
Two component regulation	Pages 539-540, 563-566, 575-578
Plasmids	Pages 183-202, 205-213
Conjugation	Pages 219-227, 232-236, 240-242, 173-176
Transformation	Pages 247-257, 260-261
Phage	Pages 265-292, 309-316
Lambda phage	Pages 323-342

Lectures, YouTube Videos, and Review Questions:

Lecture slides and Review Questions will be posted online

YouTube videos will be posted as optional "extra material" to visually explain concepts

Coronavirus and Flu Precautions:

If you feel ill or test positive for the coronavirus please do not come to class. I will work with you to make up any missed material. Lectures will be Zoom'd, recorded, and posted on Canvas for those who can't come to class.

Zoom info: <https://rutgers.zoom.us/j/98327435082?pwd=fBp0Uuchh5P5GiEokIFjsrasq7QadK.1>

Meeting ID: 983 2743 5082 Password: 029529

Those on Zoom will not be able to ask questions during the lecture (by voice or chat).

GroupMe: https://groupme.com/join_group/105301989/RxZfg2FW

Grading: 11:680:480: Exams = 500 points. 16:682:504: Exams = 500 points & proposal = 100 points

Hourly Exams:

There will be four noncumulative exams. Plus, the final exam will include questions repeated from the first three exams. See the next page for details.

The exams will be:

February 17 (Monday) covering lectures from January 22 to February 10 (100 pts)

March 10 (Monday) covering lectures from February 12 to March 5 (100 pts)

April 14 (Monday) covering lectures from March 12 to April 7 (100 pts)

May 12 (Monday) (Final exam date) covering lectures from April 9 to May 5 (100 pts) AND repeated questions from Exams 1, 2, and 3 (100 pts)

Exams from previous years are posted on Canvas

Office Hours:

If you wish to meet with me to go over some course material please email me and propose a day and time and whether you want a Zoom meeting or a face-to-face meeting. If I am available that time I will reply and confirm. If I'm not available that time I will reply and propose alternate times. I am generally available 10:00-4:00 on Monday and Wednesday, 10:00-5:00 on Thursday, and 10:00-6:00 on Tuesday and Friday.

You can also email me questions and I will try to reply within 24 hours (depends on how complex the question is).

I will monitor the GroupMe which is good for quick and simple questions.