11:680:480 and 16:682:504 Monday/Wednesday 5:35-6:55 CDL 102 Microbial Genetics 2020 Syllabus Gerben Zylstra 322 Foran Hall zylstra@sebs.rutgers.edu

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, 403-418

Transcription Pages 67-84
Translation Pages 85-101
Attenuation and riboswitches Pages 497-505
Transcription Regulation Pages 471-496
Catabolite Regulation Pages 525-536

 Two Component Regulation
 Pages 539-540, 563-566

 Plasmids
 Pages 183-202, 205-212

 Conjugation
 Pages 219-227, 232-236

 Transformation
 Pages 247-252, 260-261

 Phage
 Pages 265-292, 314-316

Lambda Phage Pages 323-342

Hourly Exams:

Wednesday, February 19: covers lectures January 22 to February 17 (100 points) Monday, March 30: covers lectures February 24 to March 25 (100 points)

Final Exam: TBA (cumulative)

100 points on lectures April 1 to May 4

40 points from lectures January 22 to March 25

<u>Textbook:</u> *Molecular Genetics of Bacteria* 4th Edition

by Snyder, Peters, Henkin, & Champness

Electronic version on Canvas, hardcover version in the Chang Library

<u>Grading:</u> 11:680:480: Three exams, 30%, 30%, and 40% (final). The first two exams will be 100 points each. The final exam will be 100 points covering the final third of the course plus 40 points from the first two thirds of the course (140 points total). The 40 point cumulative part of the final exam will be questions chosen from the first two exams. Each exam will be short answer questions (see last year's exams on Canvas). 16:682:504: Three exams, 23%, 23%, and 31% (final). Research proposal, 23%.

<u>Attendance Policy:</u> If you miss class please check with other students about what you missed. All lecture notes and all important announcements will be posted on Canvas. If you arrive late for class please come in quietly and find an open seat.

<u>Cell Phone, Tablet, and Laptop Policy:</u> Texting, surfing the internet, taking notes with electronic devices, etc. is fine during class and will not bother me while I am lecturing. However, keep in mind that you may bother the students sitting next to you. Please be considerate of those around you. If you must make or receive a phone call please feel free to step outside into the hallway at any time. Please also remember to mute all cell phones during class.

Office Hours: If you wish to see me to go over some course material please email me and propose a day and time. 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. Directions to my office: take the elevator or stairs from the Foran Hall lobby to the third floor. Make a left U-turn and walk all the way down to the windows at the end of the hall. Turn left and walk into the room 322 laboratory. My office is in the very back corner behind the file cabinets.