Genome Sciences/Microbiology 411 (Gene Action) Winter Qtr, 2009 Lecturers: Colin Manoil, Beth Traxler Lab Instructor: Kendall Gray T384 Teaching Assistants: Elizabeth Dietrich, Julie Silverman, Troy Zerr Text: Snyder and Champness, Molecular Genetics of Bacteria; 3rd ed. Lectures MWF 1:30-2:55 (T747); Exams F 1:30-2:55; Lab sections (T370) http://www.gs.washington.edu/academics/courses/manoil/41109/index.htm Required Reading 1/5 Introduction/Review 1/7 QUIZ; lac operon arcana Handout, pp 502-506 1/9 Lab orientation 1/12 **DNA** replication pp 17-48 1/14 Mutation pp 139-144, 153-167, 506-510 1/16 Lab lecture 1/19 **Holiday**-Martin Luther King Day 1/21 Mutation/DNA repair pp 459-477 EXAM 1 (through 1/21 inclusive) 1/23 1/26 pp 477-495 DNA repair **Transposition** pp 377-397 1/28 1/30 Lab lecture 2/2 **Transposition** pp 272-273, 397-400, 410-417, 423-424 Special topic 2/4 EXAM 2 (through 2/4 inclusive) 2/6 2/9 Lab lecture 2/11 Recombination pp 429-457 Regulation of gene expression 2/13 (reading to be announced) 2/16 **Holiday** 2/18 Lab lecture Phages: Lambda and P1 2/20pp 293-296, 335-337, 343-374 2/23 pp 197-240 Plasmid biology 2/25 Mutant construction, isolation, and screening (reading to be announced) 2/27 EXAM 3 (through 2/25 inclusive) 3/2 Lab lecture 3/4 Gene transfer mechanisms (reading to be announced) 3/6 Special topic

(reading to be announced)

3/9

3/11

Special topic Global Regulation