

The following schedule of lectures, discussions, and assigned reading is tentative. Major changes/additions will be announced in class and/or posted on the course website.

30 Oct **16:** The evolution of genes and genomes, continued. *ECB4* Ch 9:289-321. From RNA to protein: translation, folding, and degradation. *ECB4* Ch 7:238-253; and essential translation concepts in pp256-258.

1 Nov **17:** Translation (continued). Targeting proteins to membranes and organelles. *ECB4* Ch 15:488-498; and appropriate essential concepts pp520-522.

6 Nov **18:** The "Signal Hypothesis:" translation of secretory and membrane proteins. Vesicle trafficking: budding, targeting, and fusion. *ECB4* Ch 15:498-515; and appropriate essential concepts pp520-522.

8 Nov **19:** Vesicle trafficking: budding, targeting, and fusion (*continued*).

13 Nov **20:** Endocytosis and phagocytosis. *ECB4* Ch 15:515-522; and appropriate essential concepts pp520-522. Introduction to the cytoskeleton: Intermediate filaments. *ECB4* Ch 17:565-571 & appropriate essential concepts in pp599-600.

14 Nov Review for exam #3: 3:30-5 PM in 210 ASB.

**15 Nov** **Exam #3.** I try to write exams that can be completed within the allotted class time. However, students are occasionally provided with additional time. Please plan your schedule accordingly.

20 Nov **21:** Actin and myosin in muscle cells. *ECB4* Ch 17:583-599 & appropriate essential concepts in pp599-600.

**22-23 Nov** **Thanksgiving holiday... no classes Thursday or Friday!**

27 Nov **22:** Microtubules and flagellae. *ECB4* Ch 17:571-584; appropriate essential concepts in pp599-600.

29 Nov **23:** Cell proliferation and the regulation of the cell cycle; Mechanisms of cell division; and programmed cell death. *ECB4* Ch 18:603-642.

4 Dec **24:** Cell division, continued. Principles of cell signaling. *ECB4* Ch 16:525-563.

6 Dec **25:** Cell signaling, continued. Cell adhesion and junctions. Cell renewal, stem cells, and cancer. *ECB4* Ch 20:683-725. LAST DAY OF SCHEDULED CLASSES!

7 Dec Review for final exam: 3:30-5 PM in 220 ASB.

**11 Dec** **Final Exam (exam #4) 10:30 AM - 12:30 PM (note the time! Final exams are scheduled by the University, and the exam time and date cannot be changed).** I try to write exams that can be completed within the allotted class time. However, students are occasionally provided with additional time. Please plan your schedule accordingly.

I will send a class e-mail providing times and places that exams will be available. FERPA prohibits me from mailing or e-mailing exam results to students. Requests to re-score of the final exam or correct addition errors must be submitted to Dr. Gard's mailbox in 202A BIOL by 5 PM Friday 18 Jan 2019.