BIOLOGY 107 Introduction to Cell Biology

Mondays & Thursdays 7:00 - 10:00 p.m.
January 6 - April 27, 2000

Instructor ph. #: 865-6162

Course Text: *Biology*, 5th Edition, by N.A. Campbell *et al.* 1999.
Biology, 4th Edition is also acceptable

Grades:

Midterm Exam	25%
Labs & Assignments	35%
Final Exam	40%

Labs: Labs will take place on Thursdays in a variety of locations, which will be indicated in the lectures prior to labs. If you miss the lecture, be sure to contact myself or another student to find out where the lab will be.

Outline of Lectures: (approximate)

Jan. 6	Introduction: Course description Begin Topic 1: Cell types
Jan. 10	Cell Types (cont.) Topic 2: Internal cell structure
Jan. 17	Topic 3: Membrane structure and function Topic 4: Cell wall structure and function
Jan. 24	Cell walls (cont.) and extracellular matrix Topic 5: Molecular motors: motility and cytoskeleton
Jan. 31	Molecular motors (cont.) Topic 6: Energy flow, redox reactions, and energy transduction
Feb. 7	Topic 7: Chloroplasts and light reactions Topic 8: Photosynthesis: Calvin cycle and carbon fixation
Feb. 14	Midterm Exam 7:00 p.m. Topic 9: Carbon use: glycolysis and fermentation
Feb 21-25	*Winter Break!!*
Feb. 28	Topic 10: Mitochondria, Krebs cycle and oxidative phosphorylation
March 6	Topic 11: Cell division and population growth; cell cycle control
March 13	Topic 12: Chemistry and structure of DNA Topic 13: Transmission of DNA between prokaryotes
March 20	Topic 14: Genes and proteins: information flow and genetic code Topic 15: Transcription and RNA processing
March 27- 31	*Spring Break!!*

April 3	Topic 16: Translation and protein targeting Topic 17: Prokaryotic transcriptional control
April 10	Topic 18: Viruses: structure and replication
April 17	Review for Final Exam
April 27	*Final Exam - 7:00 p.m.*