PHYSICS 102-3* General Physics II

TEXTBOOK: "Physics"

Author: James S. Walker Publisher: Prentice Hall

COURSE DESCRIPTION:

A general survey course for life science students. Waves and optics; electricity and magnetism; modern physics.

Prerequisite: PHYS 101.

Recommended Corequisite: MATH 152, 155 or 158 should precede or be taken

concurrently. Students are encouraged to take PHYS 130 at the same time as PHYS 102.

Students with credit for PHYS 121 may not take PHYS 102 for further credit.

Topics:

- 1. Electrostatics: Forces
- 2. Electrostatics: Energy
- 3. Direct Current Electricity
- 4. Circuits
- 5. Magnetism and Electromagnetic Induction
- 6. Alternating Currents and Electronics
- 7. Electromagnetic radiation
- 8. The Propagation of Light
- 9. Geometrical Optics
- 10. Physical Optics
- 11. Atomic physics
- 12. Nuclear physics
- 13. Radioactivity

GRADING: % of Total Grade

 Weekly assignments
 10%

 2 midterms (20% + 20%)
 40%

 Final Exam
 50%

^{*}This course may be applied towards the Certificate in Liberal Arts.