

**Hagerstown Community College
MASTER SYLLABUS**

COURSE: PHY 202, General Physics 2, 4 credits, Semester offered: Spring.

COURSE DESCRIPTION: **General Physics 2, This course includes a laboratory component.*
 This course is the second semester of a two-semester sequence of algebra and trigonometry based Physics with laboratory for biology, pre-professional, and liberal arts students. The course covers electricity, magnetism, light, and selected topics in modern physics. 45 hours of lecture, 45 hours of lab. A laboratory fee is required.
 *Prerequisite: PHY 201.

TEXTBOOK: *College Physics, OpenStax College*
 ISBN-10: 1938168003, ISBN-13: 978-1-938168-00-0,
LAB MANUAL: *Physics Laboratory Experiments for PHY-202*, by Paul Jozik, HCC college store.

STUDENT LEARNING OUTCOMES:

At the end of this course, students will

1. Use mathematical models as a medium for quantitative reasoning and describing physical reality.
2. Use graphical models to analyze laboratory data.
3. Apply the classical conservation laws as a basis of deriving and understanding physics principles.
4. Describe physics concepts verbally, graphically, and mathematically
5. Solve problems individually and collaboratively
6. Use software to analyze physics experiments
7. Access, process, analyze and synthesize scientific information.

TOTAL HOURS OF COURSEWORK:

For most classes, students should expect to do at least 2 hours of coursework outside of class for each hour of in-class coursework. College students are expected to spend as much time as needed in productive work to produce success, that amount of time varies greatly from student to student.

Minimum Clock Hours Required for this Course

Component of Course	Hours In Class or Lab	Hours Outside of Class	Total Hours per Semester Outside of Class
Lecture (<i>includes testing</i>)	37.5 hours	2 hours per lecture	60 hours per semester
Exams	6.5 hours	10 hours per exam	40 hours per semester
Laboratory (<i>includes testing</i>)	37.5 hours	2.5 hour per lab	30 hours per semester
Laboratory Exams	5 hours	10 hours per lab exam	20 hours per semester
Total	75 hours		150 hours

SERVICES FOR STUDENTS WITH DISABILITIES: Students may receive reasonable accommodations if they have a diagnosed disability and present appropriate documentation. Students seeking accommodations are required to contact the Disability Support Services (DSS) office as early as possible. Students may contact a DSS staff member for an appointment at dss@hagerstowncc.edu or at 240-500-2530.