

Hagerstown Community College
MASTER SYLLABUS

COURSE: PHS104 & PHS104L, General Physical Science, 4 credits
SEMESTER/YEAR: Spring 2018
INSTRUCTOR: Bruce Tepke

COURSE DESCRIPTION: This is an active/collaborative learning science course with laboratory designed and recommended for students pursuing the AAT degree program. The course is open to all students and meets the general education science requirements. Topics include basic laws and concepts of physics and chemistry, practical applications, problem solving, and technology, data collection and analysis, computer graphics, and presentation.

SUPPLIES:

Textbook: "ISBN: 9780134092522 Edition: 6TH 17 Status:
Title: CONCEPTUAL PHYSICAL SCI.(LL)-W/ACCESS

Author: HEWITT

Publisher: PEARSON

" Hewitt

"ISBN: 9780134092522

" Pearson

"ISBN: 9780134091396 Edition: 6TH 17 Status:

Title: CONCEPTUAL PHYSICAL SCIENCE-PRACTICE BK

Author: HEWITT

Publisher: PEARSON

" Hewitt

ISBN: 9780134091396

Pearson

STUDENT LEARNING OUTCOMES: During the completion of General Physical Science, students will:

1. Discuss the nature of science, the scientific method, and the historical development of some of the laws of nature;
2. Apply the most basic laws of nature, e.g. Newton's Laws of Motion, laws of thermodynamics, electricity and magnetism, atomic structure to elementary problems in class and in the laboratory;
3. Relate the universality of the conservation of energy to classical physics and chemistry.
4. Access, process, analyze and synthesize scientific information.

TOTAL HOURS OF COURSEWORK:

In order to meet the minimum requirements for a 4 credit class, the number of class/study hours expected of the student is multiplied by 3. The total work required to earn four college credits – 150 hours/semester, or 12 hours/week during a 15 week semester (includes class time plus additional homework/study time outside of class).

Please be aware that certain courses, or certain students, may require more than *minimum* hours of work per credit each week in order to be successful in that course.

Credit Hour to Clock Hour Calculation (for 4 credit course)

Direct Faculty Instruction: One hour Instruction/week/credit

$(50 \text{ min} * 15 \text{ weeks}) \div 60 \text{ min/h} = 12.5 \text{ h/credit} * 4 \text{ credits} = 50 \text{ hours}$

Student work out of classroom: (Two hours per credit per semester)

$(2 * 50 \text{ min} * 15 \text{ weeks}) \div 60 \text{ min/h} = 25 \text{ h/credit} * 4 \text{ credits} = 100 \text{ hours}$

	Direct Faculty Instruction (in-Class)	Student work outside of class
"Lecture" time (3 credits)	37.5 h	
3 Lecture Exams Prep time LSC/Home	(included in lecture time)	21 h (exam prep)
Teach to Learn Project		7 h
Viewing online material and completing reading assignments		15 h
Comprehensive Final Exam (11 chapters)	(Included in lecture time)	10+ h Final exam prep (review notes/group study)
Homework Assignments (Connect & LearnSmart)		30+ h
"Lab" time (1 credit)	37.5 h	
Lab Preparation	1 h/lab*17 labs (included in lab time)	17 h
Total Lecture and Lab	75.0 h	100 h
TOTAL	175+ hours (may exceed minimum of 150 h for 4 credits)	

***NOTE: the above hours are estimated for the average student. You may require more or less than the suggested hours.**

***Instructor reserves the right to change the schedule as deemed appropriate.**

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.