

Hagerstown Community College
MASTER SYLLABUS

COURSE: PHS 111: EARTH AND SPACE SCIENCE - 4 credits
INSTRUCTOR: Bruce Tepke
SEMESTER/YEAR: SPRING 2018

COURSE DESCRIPTION:

This is an active/collaborative learning science course with laboratory designed and recommended for students pursuing the AAT degree program and open to all students. The topics include the earth in space and the solar system, the evolution and structure of the earth, tectonics, maps and models, weathering and water, atmosphere and oceans, data collection, analysis and presentation.

Contact hours: 45 hours lecture and 45 hours laboratory.

TEXTBOOK:

Textbook: HEWITT CONCEPTUAL PHYSICAL SCI.(LL)-W/ACCE 6TH 17 PB PEARSON
PEARSON 978-0-13-409252-2 170.90 128.20 ER
HEWITT CONCEPTUAL PHYSICAL SCIENCE-PRACTIC 6TH 17 PB PEARSON A-W
978-0-13-409139-6 78.40 58.80 ER

STUDENT LEARNING OUTCOMES

At the completion of this course, students should be able to:

1. Know, understand, and relate terms and content of each course to real life situations, case studies, and science learned in a previous course.
2. Utilize technology appropriately to communicate course concepts and to analyze experimental data.
3. Design and conduct experiments based on the scientific method; analyze and interpret results of these experiments
4. Understand different methods of assessing student performance in science classes, for example, rubrics, laboratory reports, and exams.
5. Know and understand the relationship of science to other human values and endeavors
6. Access, process, analyze and synthesize scientific information

TOTAL HOURS OF COURSE WORK EXPECTED:

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)	28 h (exam prep)
Lesson Plans/Presentations		7 h
Comprehensive Final Exam (10 chapters)	(Included in lecture time)	10+ h Final exam prep (review notes/group study)
4 quizzes		30+ h
"Lab" time (1 credit)	37.5 h	
Lab Reports	10 labs (included in lab time)	10 h
Lab Projects	As assigned	10 h
Total Lecture and Lab	75.0 h	95 h
TOTAL	170+ hours (may exceed minimum of 150 h for 4 credits)	

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