

Hagerstown Community College

Master Syllabus

COURSE: BTC 101, Introduction to Biotechnology, 3 Credits **DATE:** Spring 2018

INSTRUCTOR: C. Dove, S. Prabhakar

COURSE DESCRIPTION: This is an entry level lecture/demonstration course for students interested in the biotechnology program or who want to take a non-laboratory life science course. Basic molecular concepts, including nucleic acids, proteins and the technology used in the creation of biotechnology products will be explored. Careers and opportunities, as well as public perception and ethical issues in biotechnology, will also be discussed. Total of 45 hours of lecture. Prerequisite: MAT 099 and ENG 098 or higher.

TEXTBOOK: Biotechnology, Science for the New Millennium by Ellyn Daugherty

STUDENT LEARNING OUTCOMES:

1. Student will be able to relate aspects of biotechnology to societal services and personal career choices.
2. Students will apply a basic core of scientific and quantitative knowledge in problem-solving and knowledge of biological molecules.
3. Students will use computers to access scientific information, analyze and solve problems and explore ethical issues in biotechnology.
4. Students will access, process, analyze and synthesize scientific information.

MINIMUM CLOCK HOURS REQUIRED FOR THIS COURSE

	DIRECT Faculty Instruction In-class 37.5 h required	Student Work Out of Classroom 75 h required
In-class "lecture"	37.5 h	
Reading chapters		15 h
Quiz/activity for each chapter	Included in lecture time	10 h prep
Career research project		10 h
3 lecture exams		30 h exam prep
Cumulative final exam	Included in lecture time	10 h exam prep
Total Hours	37.5 h	75 h

On-line Minimum Course Requirements

Minimum Clock Hours Required for this Course

Component of Course	Hours on-line with assignments Class	Hours Outside Class	Total Hours per Semester Outside of Class
Lecture	37.5		
Quizzes, homework, discussion boards		3 hours per week	45
Studying for lecture exams		10 hours per exam	20
Reading text and other materials		2 hours per week	30
			95

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.