

BIOTECHNOLOGY
College Credit and Careers Network
Dual Credit Articulation Agreement

Upon completion of high school courses equivalent to the following competencies:

- Participate in class room discussions and assignments about the use of the scientific method.
 - Understand the context, value systems and assumptions that are involved in the development and use of this information. Evaluate the pro and con arguments involved in the development of capabilities of biotechnology such as stem cell research, cloning, gene therapy, germ line modification, genetically engineered agricultural products and ' environmental applications.
- Use an integrated approach to problem solving in new and potentially ambiguous situations.
 - Identify information, skills, experience and abilities acquired in various academic and professional fields to facilitate problem solving in new circumstances.
 - Describe how one's own preconceptions, biases and values affect one's response to new and ambiguous situations.
 - Use various strategies of inquiry, to reach conclusions in new and ambiguous situations.
 - Recognize, acknowledge and accept ambiguity.
- When considering individual, cultural and public responses to the applications and implications of genetic engineering, consider the scientific information, the social and ethnic issues as they affect these various groups.
- Discuss how these individuals and groups bring their own context to the application of biotechnology and demonstrate an understanding of these various viewpoints and the lack of an ability to have answers to many of the questions at this point in time.
- Global Awareness
 - Students will demonstrate understanding and awareness of issues related to and consequences of, a growing global interdependence of diverse societies by integrating knowledge from multiple disciplines. Students will describe how social, cultural, political, and economic values and norms interact.
 - Recognize the value and significance of artistic and religious expressions in various world cultures. Demonstrate an understanding of the role of these expressions in responses to the use of biotechnology.
 - Articulate the values and beliefs that influence humans in seeking identify and meaning within their culture. Discuss the effect of values and beliefs as they influence individual and group response to biotechnology.
 - Describe the impact of global interdependence on local cultures including those within the United States.
 - Discuss the world-wide efforts in the development of the science and of the business of biotechnology.
 - Demonstrate awareness and knowledge of the economic forces that have led to the interdependence of national economies and the imbalance of distribution of wealth. Discuss the role of business development patenting, regulation as they are applied to biotechnology worldwide.
 - Demonstrate knowledge of the impact of global interdependence on the natural world. Discuss the role of genetic engineering on medical, agricultural and environmental aspects of the natural world.

A student earning a “B” or better may earn college credit at the following college:

<u>College</u>	<u>Course</u>	<u>Credits</u>
Shoreline Community College	BIOSC 110	3