

CORE CURRICULUM COMPONENT APPLICATION

CORE COMPONENT AREA	Life and Physical Sciences
COURSE TYPE	Existing Core
DEPARTMENT	Biology
COURSE RUBRIC & NUMBER	BIOL 2406
COURSE NAME	Environmental Biology
CATALOG DESCRIPTION	Environmental Biology is an investigation into the study of basic ecological principles, relationships between living organisms, and problems involving energy and the environment. Emphasis is placed on human interaction with other organisms and how these relationships affect conservation, pollution, waste-management, depletion of non-renewable resources as well as environmental economics and politics. Laboratory investigations will include environmental sampling and analysis techniques. Lab fee required.
NUMBER OF SECTIONS OFFERED/FALL	1
NUMBER OF SECTIONS OFFERED/SPRING	1
EXTIMATED ANNUAL ENROLLMENT	44
COURSE LEVEL	Sophomore
CONTACT PERSON (dept. representative)	Chet Cooper
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PHONE	(432) 335-6590
DEPARTMENT APPROVAL STATUS	Approved - Date Click here to enter a date.
CORE COMMITTEE COMMENTS <small>(REQUEST FOR ADDITIONAL INFORMATION)</small>	
CORE COMMITTEE APPROVAL STATUS	Select One - Date Click here to enter a date.

Best practices and accreditation guidelines generally place the faculty in a position of responsibility for curricular decisions.

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Indicate below how each learning objective will be supported, what strategies or activities will be used to introduce each objective and how student learning will be assessed.

***NOTE: Component Area Option –**

- A. A minimum of 3 SCH must meet the definition and corresponding Core Objectives specified in one of the foundational component areas
- B. As an option for up to 3 semester credit hours of the Component Area Option, an institution may select course(s) that:
 - i. Meet(s) the definition specified for one or more of the foundational component areas; and
 - ii. Include(s) a minimum of three Core Objectives, including Critical Thinking Skills, Communication Skills, and one of the remaining Core Objectives of the institution's choice.

#	THECB CORE OBJECTIVE "ICO"	PROGRAM GOALS/OUTCOMES	COURSE LEARNING OUTCOMES	KEY IDENTIFIERS	LEARNING EXPERIENCE	ASSESSMENT
1	<p>Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.</p> <p><i>Must be addressed in all core curriculum courses</i></p>		Quantify and analyze the impact of lifestyle on the environment	Students will gain exposure to the impact of lifestyle on the environment through reading assignments and, discussion board assignments and other interactions	Students will analyze the impact of lifestyle in discussion board questions, through laboratory exercises concerning the ecological footprint, and by correctly interpreting questions on lecture and lab exams	This core objective will be assessed by an interdepartmental assessment committee using the Critical Thinking rubric.
2	<p>Communication Skills - to include effective development, interpretation and expression of ideas through written, oral and</p>		Illustrate abiotic/biotic interactions, symbiotic relationships	Students will be able to describe symbiotic relationships and abiotic/biotic factors after reading	Students will demonstrate understanding of symbiotic relationships as well as abiotic/biotic	This core objective will be assessed by an interdepartmental assessment committee using the

	<p>visual communication.</p> <p><i>Must be addressed in all core curriculum courses</i></p>			<p>assigned chapters and professor chapter summaries</p>	<p>factors through discussion board forums, laboratory exercises relating to predator and prey, as well as lecture and lab exam questions</p>	<p>Communication rubric.</p>
3	<p>Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions</p> <p><i>Must be addressed in all Mathematic, Life and Physical Sciences, AND Social & Behavioral Sciences component area core curriculum courses. Optional for all other component areas.</i></p>		<p>Describe ecological and statistical techniques and approaches used in the study of environmental biology</p>	<p>Students will read, discuss, and complete laboratory assignments that enhance their ability to make informed conclusions based on statistical data</p>	<p>Students will perform various laboratory exercises using the ecological footprint and population dynamics formulas, to analyze data and draw conclusions based on calculations and knowledge of ecological techniques and terminology</p>	<p>This core objective will be assessed by an interdepartmental assessment committee using the Empirical and Quantitative Skills rubric.</p>
4	<p>Teamwork - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.</p> <p><i>Must be addressed in all Communication, Life & Physical Sciences, and Creative Arts</i></p>		<p>Identify various types of natural resources, human impact on these resources, and common resource management practices</p>	<p>Students will read assigned chapters and participate in discussion board forums and peer review of research papers concerning these practices</p>	<p>Students will discuss their opinions of human impact on various natural resources as well as resource management practices in an effort to find common</p>	<p>This core objective will be assessed by an interdepartmental assessment committee using the Teamwork rubric.</p>

	<i>component area core curriculum courses. Optional for all other component areas.</i>				ground in their opinions and environmental goals	
5	<p>Social Responsibility: to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities</p> <p><i>Must be addressed in all Language, Philosophy & Culture, Creative Arts, American History and Government/Political Science, and Social & Behavioral Sciences component area core curriculum courses. Optional for all other component areas.</i></p>					
6	<p>Personal Responsibility - to include the ability to connect choices, actions and consequences to ethical decision-making.</p> <p><i>Must be addressed in all Communication, Language, Philosophy & Culture, American History and Government/Political Science component area core</i></p>					

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	<i>curriculum courses. Optional for all other component areas.</i>					
7						
8						
9						
10						

Critical Thinking Skills

To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

Must be addressed in all core courses

Communication Skills

To include effective development, interpretation and expression of ideas through written, oral and visual communication.

Must be addressed in all core courses

Empirical and Quantitative Skills

To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Must be addressed in all core courses that satisfy the following requirements:

- Mathematics
- Life and Physical Sciences
- Social and Behavioral Sciences
- Some Component Area Options

Teamwork

To include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

Must be addressed in all core courses that satisfy the following requirements:

- Communication
- Life and Physical Sciences
- Creative Arts
- Some Component Area Options

Social Responsibility

To include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national and global communities.

Must be addressed in all core courses that satisfy the following requirements:

- Language, Philosophy and Culture
- Creative Arts
- American History
- Government/Political Science
- Social and Behavioral Sciences
- Some Component Area Options

Personal Responsibility

To include the ability to connect choices, actions and consequences to ethical decision-making.

Must be addressed in all core courses that satisfy the following requirements:

- Communication
- Language, Philosophy and Culture
- American History
- Government/Political Science
- Some Component Area Options