

CORE CURRICULUM COMPONENT APPLICATION

CORE COMPONENT AREA	Life and Physical Sciences
COURSE TYPE	Existing Core
DEPARTMENT	Biology
COURSE RUBRIC & NUMBER	BIOL 1407
COURSE NAME	Biology for Science Majors II
CATALOG DESCRIPTION	Students continue their understanding and interpretation of biological terms with respect to plant and animal growth, plant and animal tissues and systems, evolution and behavior. A taxonomic survey of the five kingdoms is covered. Laboratory investigations include acquisition of practical experience in the dissection of a mammal with reasoning to the relationships between form and function and making decisions relative to cause and effect relationships.
NUMBER OF SECTIONS OFFERED/FALL	1
NUMBER OF SECTIONS OFFERED/SPRING	2
EXTIMATED ANNUAL ENROLLMENT	58
COURSE LEVEL	Sophomore
CONTACT PERSON (dept. representative)	Chet Cooper D.C.
EMAIL ADDRESS	ccooper@odessa.edu
PHONE	432.335.6590
DEPARTMENT APPROVAL STATUS	Select One - 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.

CORE CURRICULUM COMPONENT APPLICATION

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	Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information. <i>Must be addressed in all core curriculum courses</i>	Upon completion of this course student will be able to apply scientific principles on the physical world and on human experiences.	Describe modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.	Students will evaluate features of modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation and identify important themes.	Answer questions related to text and powerpoint presentations.	This core objective will be assessed by an interdepartmental assessment committee using the Critical Thinking rubric.
2	Communication Skills - to include effective development, interpretation and expression of ideas	Upon completion of this course student will be able to apply scientific principles	Communicate effectively the results of scientific investigations of basic animal physiology	Students will evaluate animal physiology related to individual organ systems to	Describe basic animal physiology and homeostasis as maintained by organ systems.	This core objective will be assessed by an interdepartmental assessment

CORE CURRICULUM COMPONENT APPLICATION

	<p>through written, oral and visual communication.</p> <p><i>Must be addressed in all core curriculum courses</i></p>	<p>on the physical world and on human experiences.</p>	<p>and homeostasis as maintained by organ systems.</p>	<p>determine how the organ systems maintain homeostasis of the organism.</p>		<p>committee using the 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>Upon completion of this course student will be able to apply scientific principles on the physical world and on human experiences.</p>	<p>Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.</p>	<p>Students will evaluate the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance..</p>	<p>Answer questions related to the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history.</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 component area core curriculum courses. Optional for</i></p>	<p>Upon completion of this course student will be able to apply scientific principles on the physical world and on human experiences.</p>	<p>Compare different sexual and asexual life cycles noting their adaptive advantages.</p>	<p>Students will evaluate advantages and disadvantages of each type of reproduction.</p>	<p>Answer questions related to the advantages and disadvantages of each type of reproduction.</p>	<p>This core objective will be assessed by an interdepartmental assessment committee using the Teamwork rubric.</p>

	<i>all other component areas.</i>					
5	<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 curriculum courses. Optional for all other component areas.</i></p>					
6	<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>					

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Communication Skills -

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

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
- Component Area Option of Mathematics and Logic

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:

- Life and Physical Sciences
- Creative Arts
- Government/Political Science

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
- Social and Behavioral Sciences
- Component Area Option

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:

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