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fl<+<+=144+.> None

 $( < += 144 + . > ENG-002^{L} \text{ or BSP-} 4002^{L}$ 

This course focuses on fundamental concepts of human biology. Topics include terminology, biochemistry, cell biology, tissues, body systems, and other related topics. Upon completion, students should be able to demonstrate preparedness for college-level anatomy and physiology courses.(2020 FA)

 $fl<+<+=144+.> ENG-002^{L} or BSP-4002^{L}$ 

(<+=144+.> None

This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life.(2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, and A.F.A.
- Natural Science Gen. Ed. course for A.S. and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A.S. and A.G.E.

 $fl<+<+=144+.> ENG-002^{L} or BSP-4002^{L}$ 

(<+=144+.> None

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, molecular and cellular biology, metabolism and energy transformation, genetics, evolution, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels.(2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.F.A., A.S., and A.S. Teacher Preparation
- Other Gen. Ed. and Premaior Elective Hour course for A.E.
- · Natural Science Gen. Ed. course for A.A.S. and A.G.E.

fl<+<+=144+.> BIO-111<sup>S</sup>, minimum grade CL

(<+=144+.> None

This course is a continuation of BIO 111. Emphasis is placed on organisms, evolution, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. (2014 FA) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.S., and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A., and A.A. Teacher Preparation
- · Natural Science Gen. Ed. course for A.G.E.

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 fi  $\tilde{Z}$  % f) -< @1\*-(<7  $\tilde{Z}$  (-3) 7 '89°9; Ał/fl<+<+=144+.> BIO-110<sup>S</sup> or BIO-111<sup>S</sup>, minimum grade CL (<+=144+.> None

This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Natural Science Gen. Ed. course for A.A., A.A. Teacher Preparation, A.S., and A.S. Teacher Preparation
- · Natural Science Gen. Ed. course for A.G.E.

$$\tilde{Z}$$
 fi ~?9% f) -< @1\*-(<7 B((5,67 '89~9; A+/fl<+<+=1.4.4+.> BIO-110<sup>S</sup> or BIO-111<sup>S</sup>, minimum grade CL '(<+=1.4.4+.> None

This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups. (1997 SU) This course has been approved to satisfy the following requirement(s):

- Natural Science Gen. Ed. course for A.A., A.A. Teacher Preparation, A.S., and A.S. Teacher Preparation
- · Natural Science Gen. Ed. course for A.G.E.

This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues. (1997 SU) This course has been approved to satisfy the following requirement(s):

- Natural Science Gen. Ed. course for A.A., A.A. Teacher Preparation, A.S., and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A.S. and A.G.E.

This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues. (1997 SU) This course has been approved to satisfy the following requirement(s):

- Natural Science Gen. Ed. course for A.A., A.A. Teacher Preparation, A.S., and A.S. Teacher Preparation
- · Natural Science Gen. Ed. course for A.A.S. and A.G.E.

This course covers the biochemistry of foods and nutrients with consideration of the physiological effects of specialized diets for specific biological needs. Topics include cultural, religious, and economic factors that influence a person's acceptance of food, as well as nutrient requirements of the various life stages. Upon completion, students should be able to identify the functions and sources of nutrients, the mechanisms of digestion, and the nutritional requirements of

all age groups. (1997 SU) This course has been approved to satisfy the following requirement(s):

• Premajor and/or Elective course for A.A. and A.S.

(<+=144+.> None

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This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques.(2004 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- · Natural Science Gen. Ed. course for A.G.E.

fl<+<+=144+.> BIO -110<sup>S</sup>, BIO -111<sup>S</sup>, BIO -163<sup>S</sup>, or BIO -165<sup>S</sup>, minimum grade CL (<+=144+.> None

This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms.(2023 FA) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Natural Science Gen. Ed. course for A.G.E.