MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE
COURSE OUTLINE

Faculty members are required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Academic Affairs and Standards Council.

DEPT. BIOL  __________  COURSE NUMBER: __1100______

NUMBER OF CREDITS: ___3______  Lecture: ___2____ Lab: ___1____

<table>
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<th>Course Title:</th>
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<td>Survey of Biological Sciences</td>
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<th>Catalog Description:</th>
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<td>Introduces major concepts of biology which include cell biology, patterns of inheritance, classification, evolution, and diversity of life. Special emphasis will be placed upon understanding of the science of biology and its significance to everyday life. Biology 1100 is intended for non-majors.</td>
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FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)

Goal 1: Communication: ____ by meeting the following competencies:

Goal 2: Critical Thinking: ____ by meeting the following competencies:

Goal 3: Natural Sciences: __X__ by meeting the following competencies:
  - Demonstrate understanding of scientific theories.
  - Formulate and test hypotheses by performing laboratory, simulation, or field experiments in at least two of the natural science disciplines. One of these experimental components should develop, in greater depth, students' laboratory experience in the collection of data, its statistical and graphical analysis, and an appreciation of its sources of error and uncertainty.
  - Communicate their experimental findings, analyses, and interpretations both orally and in writing.
  - Evaluate societal issues from a natural science perspective, ask questions about the evidence presented, and make informed judgments about science-related topics and policies.

Goal 4: Mathematics/Logical Reasoning: ____ by meeting the following competencies:

Goal 5: History and the Social and Behavioral Sciences: ____ by meeting the following competencies:

Goal 6: The Humanities and Fine Arts: ____ by meeting the following competencies:

Goal 7: Human Diversity: ____ by meeting the following competencies:
Goal 8: Global Perspective: _____ by meeting the following competencies:

Goal 9: Ethical and Civic Responsibility: _____ by meeting the following competencies:

Goal 10: People and the Environment: _____ by meeting the following competencies:

Prerequisites or Necessary Entry Skills/Knowledge:
None

Topics to be Covered (General)
The science of life
Chemical basis of life
Organic molecules
Cells; structure and function
Cellular reproduction
Patterns of inheritance
Diversity of life

Student Learning Outcomes
1. Define and describe biology as the science of life
2. Identify the organic molecules of life and describe their importance
3. Diagram cell structure and explain the function of the cell and its components
4. Describe and identify the mechanisms of cellular reproduction
5. Apply and compare the patterns of inheritance
6. Classify the diversity of life

Is this course part of a transfer pathway: Yes [ ] No [X]

Revised 11/19