

**JAMESTOWN COMMUNITY COLLEGE**  
**State University of New York**

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**INSTITUTIONAL COURSE SYLLABUS**

**Course Title:** Health Science

**Course Abbreviation and Number:** BIO 1510

**Credit Hours:** 3

**Course Type:** Lecture

**Course Description:** Students will investigate a variety of health-related topics, many of which are useful in planning a healthier lifestyle. Topics include stress, mental health, nutrition, human sexuality and reproduction, birth control, sexually transmitted and other diseases, cardiovascular health, cancer, drugs (including alcohol), and environmental health. This survey course is appropriate for non-science majors.

**Eligibility:** ENG 1510 without supports or Corequisite: ENG 1510 with supports.

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**General Education Requirements Met**

**SUNY**

Natural Sciences

**JCC**

Scientific Reasoning

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**Student Learning Outcomes:**

Students who demonstrate understanding can:

1. Identify potential sources of stress and consequential stress responses of the body.
  2. Integrate heart anatomy and physiology with blood circulation/oxygenation and potential heart and cardiovascular diseases.
  3. Classify various cancer types and propose possible mechanisms of cancer formation.
  4. Identify the six classes of nutrients and their relative functions, and evaluate the nutritional value of one's diet.
  5. Compare the effects of various drugs on the body and potential factors that influence drug action.
  6. Distinguish between male and female reproductive systems and their relative functions. The student will also be able to summarize the stages of fetal development.
  7. Identify various human pathogens and their identifying characteristics/potential diseases. The student will also be able to propose appropriate contraceptive devices utilized to minimize the spread of STDs.
  8. Identify various environmental pollutants and illustrate their consequential effects on environmental and human health.
  9. Demonstrate an understanding of the methods scientists use to explore natural phenomena, including observation, hypotheses development, measurement and data collection, experimentation, evaluation of evidence, and employment of data analysis or mathematical modeling. [SUNY Gen Ed – Natural Sciences]
  10. Application of scientific data, concepts, and models in one of the natural sciences. [SUNY Gen Ed – Natural Sciences]
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**Topical Outline:**

- Stress
  - Heart and Cardiovascular Health
  - Cancer
  - Nutrition
  - Responsible Use of Drugs/Alcohol
  - Human Reproduction/Contraception
  - Communicable Diseases
  - Environmental Health
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**Information for Students**

- Expectations of Students
  - [Civility Statement](#)
  - [Student Responsibility Statement](#)
  - [Academic Integrity Statement](#)
- [Accessibility Services](#)  
Students who require accommodations to complete the requirements and expectations of this course because of a disability must make their accommodation requests to the Accessibility Services Coordinator.
- [Get Help: JCC & Community Resources](#)
- [Emergency Closing Procedures](#)

- Course grade is determined by the instructor based on a combination of factors, including but not limited to, homework, quizzes, exams, projects, and participation. Final course grade can be translated into a grade point value according to the following:

A=4.0	B+=3.5	B=3	C+=2.5	C=2	D+=1.5	D=1	F=0
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- Veterans and active duty military personnel with special circumstances (e.g., upcoming deployments, drill requirements, VA appointments) are welcome and encouraged to communicate these to the instructor.

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**Effective Date:** Fall 2023