JAMESTOWN COMMUNITY COLLEGE
State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Wildflowers of Spring

Course Abbreviation and Number: BIO 1525 **Credit Hours:** 1 credit hour. **Course Type:** Lecture

Course Description: Students will explore the beauty and biology of out local spring wildflowers, and gain a fascinating glimpse into the identification, classification, evolution, survival strategies, conservation challenged, and ecological significance of our springtime ephemerals. Complex co-evolutionary strategies for pollination, seed dispersal, and defense against herbivory will be examined, and ecological relationships and interdependencies among fungi, flowers, and animals will be explored. Various threats to active plant communities, such as habitat loss, climate change, loss of pollinators, and impacts of invasive species will be described and discuss. Lectures will incorporate multimedia content, outdoor fieldwork, and hands-on exploration and identification of our backyard blooms in local fields, forests, and wetlands.

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

Student Learning Outcomes:

Students who demonstrate understanding can:

1. Identify and describe key morphological, anatomical, and reproductive structures of local wildflowers.
2. Critically apply and interpret basic scientific principles and methods in organismal biology, including taxonomic classification, nomenclature, and identification of local floral diversity in the natural world..
3. Demonstrate an understanding of the complex co-evolutionary survival strategies of flowering plants in relation to pollination, seed dispersal, nutrient uptake, defense against herbivory, and other key aspects of floral life.
4. Recognize and describe threats to local native wildflowers of wetlands, fields, and forests, such as habitat loss, introduction of non-native, invasive species, loss of pollinators, pollution, climate change, and others.
5. Formulate a deeper understanding and appreciation for the interactions and interdependencies between flowering plants, people, and the natural world.

Topics Covered:

- General Introduction
- Evolutionary history of flowering plants
- Floral anatomy: monocot and dicot floral structure and function
- Taxonomy: classification and categorization of major plant families
- The season of spring: racing for the sun
- Life cycles, reproduction, and renewal
- Co-evolutionary adaptations, community, and connections.
- Environmental cures and critical conditions
- Chemical complexity
- Environmental threats
- Local conservation efforts and collaboration
- Into the wetlands, fields, and forests
- Recording your encounters

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

- 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.

Effective Date: Fall 2021