# JAMESTOWN COMMUNITY COLLEGE

**State University of New York** 

## INSTITUTIONAL COURSE SYLLABUS

Course Title: Catastrophic Weather

Course Abbreviation and Number: GLG 1740 Credit Hours: 1 credit hour. Course Type: Lecture

**Course Description:** Students will be introduced to the field of meteorology and explore general weather principles and the where, when, why, and how of catastrophic weather events such as thunderstorms and lightning, tornadoes, hurricanes, floods, and drought. Methods to prepare and protect you and your family against these natural disasters are also covered.

Eligibility: ENG 1530.

## **Student Learning Outcomes:**

Students who demonstrate understanding can:

- 1. Describe and identify basic circulation patterns of the earth.
- 2. Explain and describe high and low pressure and cyclic wave development.
- 3. Describe the relationship between thunderstorms, tornadoes, and super cells.
- 4. Describe Nor'easters and Hurricanes.
- 5. Describe and explain the mechanisms of climatic change.

### **Topics Covered:**

- Atmospheric structure
- Earth's heat balance
- Global Circulations
- High & Low fronts
- Wave cyclones
- Thunderstorms
- Tornadoes
- Nor'easters
- Hurricanes
- El Nino/La Nina
- Climate Change
- Mechanisms of climate change
- Possible results of Global Warming

### **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