



Spring 2021 Special Topics in Physical Oceanography: The Gulf Stream (1 credit reading class) OEAS 895

Class time: Wednesday, 9:00am-9:50am, <u>First Class:1/20/2021</u> **Place**: Online (Zoom link will be sent to students)

Class intended for: any OEAS graduate student (MS or PhD)
Requirements: none (but remembering material from 604 Physical Oceanography may help)
Grading: P/F

Web page for class notes: http://www.ccpo.odu.edu/~tezer/895 2021/

Instructor: Tal Ezer (Phone: 683-5631; Email: tezer@odu.edu)

Office: CCPO, 4111 Monarch Way, Room 3217

Office Hours: Monday, 9am-11am (email to schedule other times)

Course Description:

This reading class will focus on the most famous ocean current- the Gulf Stream, reviewing various past studies of the Gulf Stream. Students will read papers provided by the instructor, give presentations, and discuss the studies in class.

Potential Topics:

- Observations- from earliest ship observations to modern measurements by satellites, drones, etc.
- Theories of the Gulf Stream dynamics (e.g., why does it separate from the coast at Cape Hatteras?).
- The Gulf Stream's role in weather and climate (e.g., does it really affect Europe's weather?)
- Can computer models simulate a realistic Gulf Stream?
- Will a catastrophic disaster destroy civilizations if the Gulf Stream suddenly halts? (i.e., like in the movie "The Day After Tomorrow")