Fall Semester 2019

Small-Scale Air-Sea Interaction

[OCN 665/ATMO665]

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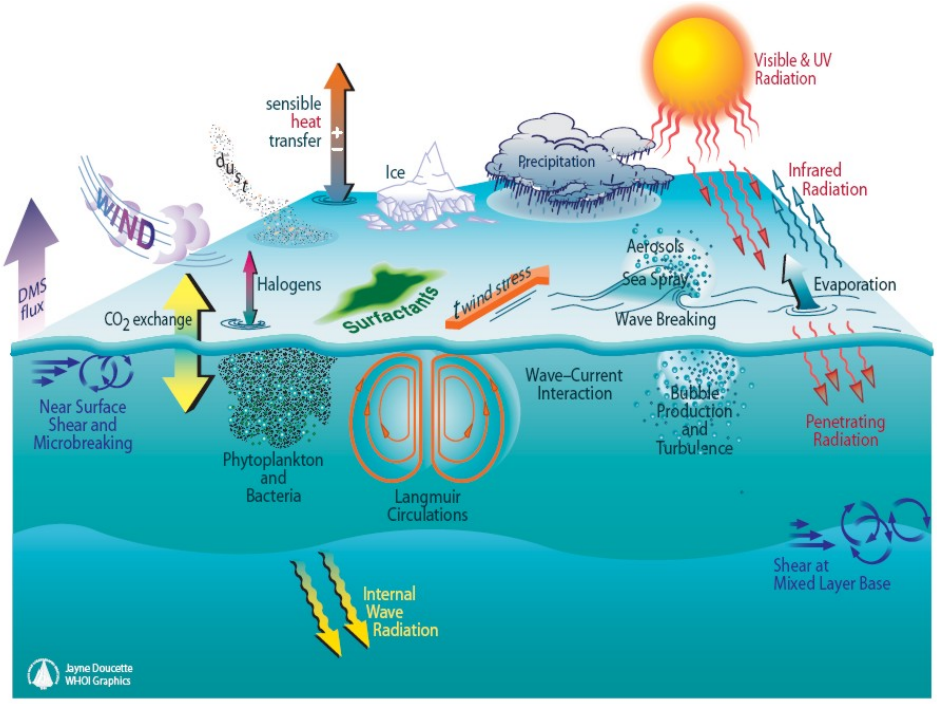
Do you want to understand these physical processes and how they contribute to weather and climate?



This course will introduce oceanography and atmospheric science students to processes in the lower atmosphere and upper ocean that contribute to the transport of heat, momentum and other properties, and their transfer between the two media. Such processes underlie the coupling between the ocean and atmosphere. Topics covered include: theories of turbulent boundary layers, the physics and thermodynamics of planetary boundary layers, ways to observe the lower atmosphere and upper ocean, the role of surface and internal waves and the Earth's rotation, the impact of lateral variability such as fronts.

Prerequisites: OCN 620 or ATMO 600 + math through ordinary and partial differential equations; or consent of instructors.