## UNIVERSITY OF CONNECTICUT

Department of Marine Sciences Presents a Seminar by

## **Colleen Mouw** University of Rhode Island, Graduate School of Oceanography

## Phytoplankton Community Size Structure – Environmental Controls and Export

Phytoplankton play key roles as the base of the marine food web and as a crucial component in the Earth's carbon cycle. Global phytoplankton communities have been changing in response to a shifting climate. Such changes have far reaching implications for the magnitude and efficiency of the biological carbon pump and for the structure and function of higher trophic levels. Utilizing advances in detecting phytoplankton functional types from ocean color satellite imagery, I will describe improved understanding of the impact of phytoplankton size on particle export, remineralization, and transfer. Combining these products with physical properties (PAR, euphotic depth, sea surface temperature, sea level anomaly, heat flux, mixed layer depth and stratification) across a variety of missions spanning from 1997 to 2015, I will also explore changing patterns in phytoplankton community composition, in response to environmental controls.

Host: Melanie FewingsTime & Date: 11:00 am, Friday, September 29, 2017Place: Marine Sciences Building, Seminar Room 103

For cancelations and additional seminar information, please see <u>http://marinesciences.uconn.edu/seminar/seminar1178/</u>, email <u>marinesciencesseminars@uconn.edu</u>, or call 860-405-9152 or 860-405-9151