

Plankton, Aerosol, Cloud, ocean Ecosystem

“What’s behind the curtain of the NASA PACE mission?”

The NASA PACE Project and Ocean Carbon and Biogeochemistry (OCB) Program will offer a **one-week summer class** to provide in-depth insight into the **upcoming PACE mission** (scheduled for launch in January 2024) as well as to inform on passive satellite remote sensing, with foci on both oceans and atmospheres. This class will encompass not just lectures on Earth science, but also details on PACE instruments’ performance and how they relate to derived geophysical products, uncertainties, and ultimately, Earth system models. In addition to **PACE scientists, mission and instrument systems engineering staff** will provide insight into details that are often not readily available to the research community (e.g., design choices that impact products, agency hurdles that dictate mission lifecycle, and rationales for instrument concepts).

Course elements:

- History of ocean color / atmospheric observations from satellites
- Why PACE? Earth system science in a satellite consumer’s market.
- How does it work? Spectroscopy, polarimetry, radiative transfer through the atmosphere and ocean
- Behind the scenes of the observatory: The OCI, HARP2, SPEXone instruments
- Using PACE data
- Fireside chats: career paths in Earth science, communicating Earth science, and navigating NASA funding

Dates: 1-5 August 2022

Location: In-person; Baltimore, MD area (TBD)

Participation: ~30 students

Costs: Travel and room/board will be covered through an OCB grant to qualified participants*

Application deadline: 11 March 2022

To apply:

- Access the application form found here: <https://forms.gle/5xKtcLQisRgkAJnA7>
- Submit a CV (2-page limit), letter of support from an advisor/supervisor, and personal statement that illustrates how this class will support your professional development

Acceptance criteria: Applications will be evaluated based on timeliness in career and capacity to benefit from course, background and relevant experience, and capacity to play a future leadership role in PACE and/or satellite oceanography. While the majority of the class will likely be composed of US-based students, international students will be considered for admission.

*International travel and associated costs to/from the class location will be the responsibility of the student or student’s home institution.

