**Data Science in Oceanography, Undergraduate Summer Program**

OceanHackWeek Seattle Satellite Event

In person at the University of Washington, School of Oceanography, August 8–26, 2022

**Ocean Sciences Building** (OCN) is located at 1492 NE Boat St, Seattle, WA 98105

**Lander Hall** is located at 1201 NE Campus Pkwy, Seattle, WA 98105

Marine Geology and Geophysics = **MGG**

Chemical Oceanography = **CO**

Biological Oceanography = **BO**

Physical Oceanography = **PO**

Machine Learning = **ML**

| **Monday, Aug 8th** | | | |
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| 9:30 am | Welcome, introductions | Rick Keil, Georgy Manucharyan | OCN 425 |
| 10 am | PO lecture | Alison Gray | OCN 425 |
| 11am–11:15 | Coffee break |  | OCN 425 |
| 11:15am | PO Research Talk | Cassia Cai and ??? | OCN 425 |
| Noon-1:15 pm | Lunch |  | Lander Hall |
| 1:30–3pm | PO tutorial | Georgy Manucharyan (ENSO+xarray) | OCN 425 |
| 3:30-4pm | Lab Tour (GFD/Argo) | Georgy/Alison | OCN107 |
| **Tuesday, Aug 9th** | | | |
| 9:30 am | Gather together |  | OCN 425 |
| 10am | CO Lecture | Randie Bundy | OCN 425 |
| 11am–11:15 | Coffee break |  | OCN 425 |
| 11:15am | CO Research Talk | Yang Xiang, Marin Cornec | OCN 425 |
| Noon-1:15 pm | Group Lunch |  | Lander Hall |
| 1:30–3pm | CO Python Tutorial | Randie,Will, Georgy? HOT + CO2 data, acidification? | OCN 425 |
| 3:30pm-4pm | Lab tour?? |  |  |
| **Wednesday, Aug 10th** | | | |
| 9:30 am | Gather together |  | OCN 425 |
| 10 am | BO Lecture | Jodi Young | OCN 425 |
| 11am | Coffee break |  | OCN 425 |
| 11:15am | BO Research Talk | Kathrine Qi | OCN 425 |
| Noon-1:15 pm | Group Lunch |  | Lander Hall |
| 1:30–3pm | BO Python Tutorial | Kathy, Will? Georgy could do the Phytoplankton classification problem with machine learning | OCN 425 |
| 3:30-5pm | Fun/sport activities? Or lab tour? | ? |  |
| **Thursday, Aug 11th** | | | |
| 9:30 am | Gather together |  | OCN 425 |
| 10 am | MGG Lecture | William Wilcock | OCN 425 |
| 11 am | Coffee break |  | OCN 425 |
| 11:15 am | MGG Research Talk | Zoe Krauss, Maleen Kidiwela | OCN 425 |
| Noon-1:15 pm | Group Lunch |  | Lander Hall |
| 1:30 – 3 pm | MGG Python Tutorial | Zoe Krauss, Maleen Kidiwela (+Georgy?) | OCN 425 |
| 3:30pm-4pm | Lab tour?? |  |  |
| **Friday, Aug 12th** | | | |
| 9:30 am | Gather together |  | OCN 425 |
| 10 am | ML Lecture | Georgy (Steve Brunton? Or Maike?) | OCN 425 |
| 11am–11:15 | Coffee break |  | OCN 425 |
| 11:15am | ML Research Talk | Scott Martin | OCN 425 |
| Noon-1:15 pm | Group Lunch |  | Lander Hall |
| 1:30–3pm | ML Python Tutorial | Scott Martin, Georgy Manucharyan (ML basics, classification, NN, CNN) | OCN 425 |
| 3:30-5pm | Tour of server room, Fun/sport activities? | ? |  |
| **Weekend Activities** | | | |
|  | Hiking trip?  Downtown?  Museum?  What’s a classic Seattle activity? |  |  |
|  |  |  |  |
| **Week 2: OceanHackWeek**  Choosing projects, doing tutorials, making progress in teams on individual projects. | | | |
| **Week 3. Finishing up projects + learning about scientific writing + exploring grad school application process + fellowship opportunities etc**  **Final presentations on Friday.** | | | |