

**Course offered for the PhD program in Civil, Chemical and Environmental Engineering
Curriculum in Fluid Dynamics and Environmental Engineering and for the PhD in Marine Science
and Technology Curriculum Engineering for Marine and Coastal Environments
(possibility of participation for students in other PhD cycles or other PhD courses)**

1. Title

ADCP (Acoustic Doppler Current Profiler) Crash Course

2. Course Description

The purpose of the course is to learn how an ADCP works and how to process and analyze ADCP data.

Topics to be covered:

- review of principles of ADCP operation;
- considerations for programming an ADCP;
- structure of ADCP files;
- basic treatment of ADCP data to extract valid and useful information;
- techniques for analysis such as filtering, spectral & coherence analysis, principal component analysis, and wavelet transform and coherence.

3. Course Organization

The course consists of frontal lectures and computer-based exercises. Participants should bring laptops with matrix-based program to analyze data

4. Teacher

Arnoldo Valle-Levinson arnoldo@ufl.edu

5. Duration and credits

12 hours/2 credits

6. Deadline for registration

Registration within the 30th of November 2019

Please register here <https://forms.gle/Ss3sHZHuZ549zyMA8>

7. Teaching period

Schedule 12-13 December 2019

	Thu 12/12	Fri 13/12
9.00-11.00		Room B3
11.00-13.00		Room B3
15.00-17.00	Room B3	Room B3
17.00-19.00	Room B3	Room B3

8. Final exam

A tutorial exercise will be developed during the course. The assessment of the tutorial will decide whether or not to pass the examination.