Project ROVe: Design and Build (in-person course)

To participate in this course, you must have successfully completed **Project ROVe: Introduction to ROVs*

Project ROVe (Remotely Operated Vehicles for Educators) educates and empowers Teacher at Sea Alumni to integrate maritime technology into their curriculum through underwater robots.

In this course, you will collaborate with other alumni and representatives from the National Marine Sanctuary Foundation and/or NOAA's Office of National Marine Sanctuaries (ONMS) to explore ROV technology, build underwater ROVs, and create an implementation plan for your classroom.

Project ROVe Goals:

- To bridge engineering and other subjects in a transdisciplinary and engaging way, while meeting required standards.
- To infuse maritime technology into course curriculum.
- To introduce students to various STEM career fields.
- To create opportunities for alumni to collaborate around a topic area.
- To promote team development with the Teacher at Sea Alumni Association and its alumni, NOAA, the National Marine Sanctuary Foundation, and other partners, locally and globally.

Course Overview and Statement of Work

Course Goals:

This course will consist of an in-person, ROV building workshop. For this hands-on workshop, you can expect to build a SeaMATE [Pufferfish ROV](#) (which you will get to take home) and connect with ROV cohort alumni as well as representatives from the National Marine Sanctuary Foundation and/or NOAA's Office of National Marine Sanctuaries (ONMS).

Tasks/Responsibilities (before, during, and after the course):

- Active participation in the ROV building workshop
- Create a detailed plan for integration into your curriculum (building on from your plan in *Introduction to ROVs*)
- An ongoing commitment to the use of ROVs in your programming

Project ROVe: Design and Build

Monthly Schedule At-A-Glance

Pre-Workshop Prep	In-Person Workshop	Final Implementation Plan
• Pre-workshop homework: There will be some resources shared that will help you be better prepared for the ROV building workshop. • Reviewing the following topics is also recommended: circuits, soldering, and buoyancy	• ROV Building Workshop - March 4-5, 2023, in Savannah, GA. Travel on March 3rd and 6th, 2023.	• Finalize Project Implementation plan due date TBD

Deliverables for Successful Course Completion (30 hours)

1. Attending in-person workshop and completing activities
2. ROV Implementation/Unit Plan with budget

Costs Associated with Course to be Paid for by the Alumni Association:

- One SeaMATE Pufferfish ROV Kit: $290
- Pufferfish Practice Board, Wire Soldering Lab Kit, Components Grab Bag, and PowerPole Connector ($55)
- One lithium battery and charger: $100
- Travel, food, and lodging for in-person workshop (~ $2,500)
- The course is free of charge to alumni, but graduate credits must be paid for by the alum (see below).

Opportunity for Graduate Credit/Course Completion Certificate:

This course is considered a graduate level course and we have partnered with the University of St. Francis (the same institution we use for graduate credits for the Teacher at Sea experience) to offer three graduate credits for successful completion of the course and three additional assignments as detailed in this syllabus.

Alumni are responsible for registering and paying for the course (RECT 695: Remotely Operated Vehicles II) and completing the final assignments for the University. TASAA will share updated registration information when it becomes available. If you do not need graduate credits for your professional development, you will be provided with a certificate to document your hours upon successful completion of the course.

I _____understand that if I fail to participate in the course activities, I may be required to return the course materials to the Alumni Association. I also understand that I must complete all required activities in order to receive a certificate of course completion and/or apply for graduate credits.

_____   _____
Signature   Date