

Course

Introduction to seaweed taxonomy

San Pedro de Manglaralto, 13-15 September 2019



Programme

Friday, 13th of September

13:45	Arrival of participants and registration	Entrance of the main building, CENAIM
14:00	Welcome, program, project overview, and safety (Sofie Van Den Hende, PhD)	Classroom Sala de Conferencias, CENAIM
14:15	Introduction to seaweed diversity and taxonomy (Olivier De Clerck, PhD)	
15:30	Break with coffee/tea	
16:00	Seaweed sampling and preservation (Olivier De Clerck, PhD)	
17:45	Briefing on the logistics of the field trips (Adrian Marquez, PhD(c) - Sofie Van Den Hende, PhD)	
18:00	End of day 1	

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Saturday, 14th of September

8:50 Meeting	Ayangue village
9:00 Walking to the seaweed sampling site	Ayangue village to Marine Reserve El Pelado
9:20 Seaweed observation and sampling while snorkeling/walking	Marine Reserve El Pelado
11:40 Walking from the sampling site to a restaurant	Reserve to Ayangue beach
12:00 Lunch (at own expenses; USD 4-10) and refreshing in hotel	Ayangue beach
13:20 Transport in taxi (at own expenses: USD 2)	Ayangue to CENAIM
13:30 Short visit of CENAIM laboratories: phytoplankton, zooplankton, fish, mollusks and echinoderms (Doris Reyes Biol. - Adrian Marquez, PhD(c))	Different laboratories, CENAIM
14:30 Herbarium practices and storage of samples for DNA analysis	Laboratory in the main building, CENAIM
15:30 Break with coffee/tea	Esplanade, CENAIM
16:00 Identification of seaweed samples based on morphology (microscopes, stereoscopes)	Laboratory in the main building, CENAIM
18:00 End of day 2	

Sunday, 15th of September

9:00 Transport in bus to the seaweed sampling site	CENAIM to Ballenita
10:00 Seaweed observation and sampling	Ballenita beach
12:00 Transport in bus	Ballenita to CENAIM
13:00 Lunch (at own expenses: USD 5)	Restaurant of CENAIM
14:00 Identification of seaweed samples based on morphology and histology analysis (microscopy and staining techniques)	Laboratory in the main building, CENAIM
15:30 Break with coffee/tea	Esplanade, CENAIM
16:00 DNA-assisted identification of seaweeds (Olivier De Clerck, PhD)	Classroom
17:30 Course certificates, course evaluation, and future application of gained knowledge (Sofie Van Den Hende, PhD)	Sala de Conferencias, CENAIM
18:00 Group picture and end of course	Esplanade, CENAIM

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Location

The classes and lab work of the course take place at the National Center of Aquaculture and Marine Sciences - Centro Nacional de Acuicultura e Investigaciones Marinas (CENAIM). CENAIM is a research center of the University Escuela Superior Politécnica del Litoral (ESPOL). It is located on the beach in the coastal village San Pedro de Manglaralto next to the football field.

Address: CENAIM, Ruta del Spondylus, San Pedro de Manglaralto, province Santa Elena, Ecuador.



CENAIM in San Pedro de Manglaralto

Organizers

This course is organized by CENAIM of ESPOL and Ghent University in the framework of the project “Desarrollo de la bioeconomía de macroalgas: Estrategia sostenible para mitigar enfermedades emergentes del camarón” supported by the Inédita program of Senescyt and financially supported by ESPOL and Ghent University.

Invited guest lecturer:	Olivier De Clerck, PhD	- Ghent University, Belgium
Local organizers/trainers:	Sofie Van Den Hende, PhD	- ESPOL, Ecuador (coordinator)
	Adrian Marquez, PhD(c)	- ESPOL, Ecuador
	Doris Reyes, Biol.	- ESPOL, Ecuador
	Yessenia Pozo, Biol.	- ESPOL, Ecuador

The organizers have permission from the Ministry of Environment of Ecuador to take seaweed samples according to contract MAE-DNB-CM-2018-0103 and scientific research authorization 010-18IC-FAU-DPSE-MA.

Requirements to participate

As the course language is English, a sufficient level of **English** understanding, speaking and writing is required to be able to participate in this course.

As this course includes field trips to the ocean and laboratory work, being able to **swim** and having a **medical insurance** valid in Ecuador during the course are required.

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Course fee

Until the 4th of September, 2019: US\$ 85,00.
From the 5th until the 10th of September, 2019: US\$ 100,00.

This fee includes the course materials, coffee/tea breaks, transport CENAIM-Ballenita on Sunday and a course certificate. Breakfast/lunch/dinner, accommodation and renting of snorkeling gear (optional) are not included. We recommend you to stay at the touristic village Ayangue. There are several very nice hotels in Ayangue. www.booking.com or www.airbnb.com offer a wide range of hotels here with prices starting from US\$ 30,00 for two nights.

Information

For more information please contact:

Sofie Van Den Hende - shende@espol.edu.ec – Tel. +593 (0)4 3035098.

Registration

The number of participants is limited to 20. We recommend you to register as soon as possible. To register, please fill in the registration form and send it to shende@espol.edu.ec latest on Thursday the 5th of September of 2019. After registration and verification of the participation requirements, payment details will be sent to you. The course fee needs to be paid before the course starts.

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Registration form for the course

Introduction to seaweed taxonomy

San Pedro de Manglaralto, 13-15 September 2019

Please send to shende@espol.edu.ec latest on the 5th of September of 2019.

Participant		
First names:		
Last names:		
Affiliation	Function:	
	Name:	
	Address:	
	City, country:	
E-mail:		
Cell phone including country code*:		
Birth date:		
Highest diploma:		
Be able to swim (yes/no):		
Mother language:		
English level*: (basic, good, excellent)	Understanding:	
	Speaking:	
	Writing:	
Medical insurance valid in Ecuador during course	Name:	
	Tel.:	
Motivation to participate in the course (30-50 words):		
Invoice details		
I need an invoice (yes/no):		
Name:		
Address:		
City:		
Country:		
Identification/tax number:		
Phone:		

* A member of ESPOL might call you to verify your English level.

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