



**19th - 23rd April**

# **INTENSIVE COURSE**

## **INTRODUCTION TO THE MONITORING OF ALGAL BLOOMS WITH REMOTE SENSING**

Irene Laiz - University of Cadiz



### **Theory lessons (6h)**

Harmful Algal Blooms (HABs)  
Optical Oceanography  
Ocean colour Remote Sensing  
Remote sensing techniques



### **Computer workshops (9h)**

Introduction to Bilko  
Study of an algal bloom event  
Analysis of chlorophyll remote sensing images



### **Questionnaires**

Questionnaires to evaluate the results obtained. ECTS

## **You can apply now!**

Be part of this innovative learning experience, an intensive course shared with students from 6 universities

[localmanager.seaeu@uca.es](mailto:localmanager.seaeu@uca.es)

19th - 23rd April

VIRTUAL

# INTENSIVE COURSE

## INTRODUCTION TO THE MONITORING OF ALGAL BLOOMS WITH REMOTE SENSING

Irene Laiz - University of Cadiz

# PROGRAMME

### **THEORY LESSON 1 (ONLINE-ASYNCHRONOUS): 19/04/21**

- INTRODUCTION TO HARMFUL ALGAL BLOOMS (HABS)
- MECHANISMS RESPONSIBLE FOR HABS
- CLIMATE CHANGE AND HABS

### **THEORY LESSON 2 (ONLINE-ASYNCHRONOUS): 20/04/21**

- OPTICAL OCEANOGRAPHY
- CLASSIFICATION SCHEMES OF WATER TYPES
- INTRODUCTION TO OCEAN COLOUR REMOTE SENSING
- DATA PROCESSING LEVELS
- OCEAN COLOUR SENSORS
- REMOTE SENSING TECHNIQUES FOR MONITORING HABS

### **QUESTIONNAIRE 1 (ONLINE): 20/04/21**

- QUESTIONNAIRE TO EVALUATE THE THEORY KNOWLEDGE ACQUIRED.

### **COMPUTER WORKSHOP 1 (ONLINE-ASYNCHRONOUS): 21/04/21**

- INTRODUCTION TO BILKO TO ANALYSE OCEAN COLOUR REMOTE SENSING IMAGES (A SELF-EXPLANATORY GUIDE WILL BE PROVIDED)

### **QUESTIONNAIRE 2 (ONLINE): 21/04/21**

- QUESTIONNAIRE TO EVALUATE THE TECHNICAL SKILLS ACQUIRED WITH BILKO.

### **COMPUTER WORKSHOP 2 (ONLINE-ASYNCHRONOUS): 22/04/21**

- ANALYSIS OF OCEAN COLOUR REMOTE SENSING IMAGES USING BILKO TO STUDY AN ALGAL BLOOM EVENT OFF THE COAST OF NAMIBIA (A SELF-EXPLANATORY GUIDE WILL BE PROVIDED)

### **QUESTIONNAIRE 3 (ONLINE): 22/04/21**

- QUESTIONNAIRE TO EVALUATE THE RESULTS OBTAINED WITH BILKO AND THEIR INTERPRETATION WITHIN THE CONTEXT OF THE THEORY KNOWLEDGE ACQUIRED.

### **COMPUTER WORKSHOP 3 (ONLINE-ASYNCHRONOUS): 23/04/21**

- ANALYSIS OF CHLOROPHYLL REMOTE SENSING IMAGES WITH BILKO USING ALGORITHMS FOR DIFFERENT WATER TYPES (A SELF-EXPLANATORY GUIDE WILL BE PROVIDED).

### **QUESTIONNAIRE 3 (ONLINE): 23/04/21**

- QUESTIONNAIRE TO EVALUATE THE RESULTS OBTAINED WITH BILKO AND THEIR INTERPRETATION WITHIN THE CONTEXT OF THE THEORY KNOWLEDGE ACQUIRED.