| Optional course – main information | |
|---|---|
| Academic subject | Biology and conservation of Cetaceans |
| ECTS credits (CFU) | 4 CFU |
| Compulsory attendance | |
| Teaching language | Italian |
| Accademic Year | 2019/2020 |

| Professor/Lecturer | |
|---|---|
| Name & SURNAME | Roberto Carlucci |
| email | roberto.carlucci@uniba.it |
| Tel. | 080 5443342 |
| Tutorial time/day | By mail appointment |

| Course details | Pass-fail exam/Exam with mark out of 30 | SSD code | Type of class |
|---|---|---|---|
| | Exam with mark of 30 | BIO/07 | Lecture/workshop |

| Teaching schedule | Semester | day and time (afternoon) | room |
|---|---|---|---|
| | II | Tuesday and Thursday | |

| Lesson type | CFU/ECTS | Lessons (hours) | CFU/ECTS lab | Lab hours | CFU/ECTS tutorial/workshop | Tutorial/workshop hours | CFU/ECTS field trip | Field trip Hours |
|---|---|---|---|---|---|---|---|---|
| | 3,5 | 28 | | | | | 0,5 | 12,5 |

| Time management | Total hours | Teaching hours | Self-study hours |
|---|---|---|---|
| | | | |

| Academic Calendar | First lesson | Final lesson |
|---|---|---|
| | 3 March 2020 | |

| Syllabus | |
|---|---|
| Course entry requirements | |
| Expected learning outcomes (according to Dublin Descriptors) (it is recommended that they are congruent with the learning outcomes contained in A4a, A4b, A4c tables of the SUA-CdS) | |
| *Knowledge and understanding* | |
| *Applying knowledge and understanding* | |
| *Making informed judgements and choices* | |
| *Communicating knowledge and understanding* | |
| *Capacities to continue learning* | |

| Syllabus | |
|---|---|
| Course content | The course is divided into subject areas related to the biology and ecology of Cetaceans (Odontocetes and Mysticetes) in the Mediterranean Sea. Lectures will be focussed on the knowledge of the principal monitoring methods and data collection (GPS data, group size estimation, activities and behaviors, bio-acoustics, etc.) related to dolphins and whales in the Mediterranean. A focus will be on understanding how Cetaceans adapt to their habitat and to the analysis aimed at defining the functional roles that Odontocetes and Mysticetes play in the marine ecosystem. The course is addressed to students of the |

| | |
|---|---|
| | Master's Degree in Environmental Biology and Master's Degree in Nature Sciences. The maximum number is 20 students selected according to the enrollment order.<br>The course includes field activities to be carried out on board of vessels suitable for observing Cetaceans and collecting bio-ecological data. |
| Course books/Bibliography | Advanced Distance Sampling Estimating abundance of biological populations Buckland S.T., Anderson D.R., Burnham K.P., Laake J.L., Borchers D. L., Thomas L. Oxford University Press. |
| Notes | |
| Teaching methods | |
| Assessment methods (indicate at least the type written, oral, other) | Oral exam |
| Evaluation criteria (Explain for each expected learning outcome what a student has to know, or is able to do, and how many levels of achievement there are | EDUCATIONAL PROGRAM<br><br>1. Introduction to the Mediterranean Cetaceans (3 h)<br>2. Hints of evolution and morphological and physiological adaptations for life at sea (2 h)<br>3. Visual survey methodologies from different observation platforms (Distance Sampling, Air Survey, etc) (4 h)<br>4. Cetacean photo-identification techniques (3 h)<br>5. Outline of marine bio-acoustics: vocalization, eco-location and underwater noise as a potential anthropic disturbance (2 h)<br>6. Study of Cetacean behavior: activity, behavioral categories, focal point scanning method (3 h)<br>7. Outline of genetic sampling, potential of the methodology regarding management and conservation aspects (2 h)<br>8. Identification and definition of preferential habitats, anthropogenic interactions (3 h)<br>9. The role of Cetaceans in the marine trophic network (4 h)<br>10. The management and conservation of Cetaceans in the Mediterranean (2 h)<br>11. Exercises at sea (12.5 h) |
| Further information | |