UNIVERSIDADE FEDERAL DE SANTA CATARINA
CENTRO DE CIÊNCIAS BIOLÓGICAS
DEPARTAMENTO DE ECOLOGIA E ZOOLOGIA
PROGRAMA DE PÓS-GRADUAÇÃO EM ECOLOGIA

Code: ECO410021 (antiga)

Name of the course: SPECIAL TOPICS: SCIENCE AND MANAGEMENT FOR CONSERVATION

Nº credits: 01 **Total Hours-Classroom:** 15

Professors: Renato Hajenius Aché deFreitas
Alfonso Aguilar-Perera

Semester/Year: 01/2024

Period: 05/06/2024 (Wednesday); 07/06/2024 (Friday); 10/06/2024 (Monday)

Horário: All days from 09:00 to12:00h and WED and FRID 14:00 to 17:00.

Number of vacancies: 40

Classroom: To be defined

Schedule and location: Classroom of Laboratório de Biologia de Teleósteos e Elasmobrânquios (LABITEL) – Sala 12 Bloco C – CCB.

Pre-requirments: None

Ementa:

Purpose of biological conservation and management of marine resources; social, cultural, and economic dimensions in conservation and management; initiatives and national programs, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES); International Union for Conservation of Nature in assessing species at risk; Ecosystem services; Methods for conservation (risk of extinction, restoration, marine protected areas); Methods for management of fishery resources; main threats and conservation; overexploitation, habitat fragmentation; introduction of species and climate change; Local Ecological Knowledge to identify priorities in conservation; socio-ecological approach for conservation and management of marine resources; Citizen science for promoting conservation and management.

Teaching methodology: Lectures, Debates, Discussions and Focus groups.

Assessment: student presentations addressing learnt contents and discussion with other students

Contents and calendar:

Day and Hours	Topic	Professor
05/06 09:00–12:00h	Introduction	Renato, Alfonso
05/06 14:00–17:00h	Ecosystem Services; IPBES and IUCN	Renato, Alfonso
07/06 09:00–12:00h	Methods for Conservation	Renato, Alfonso
07/06 14:00–17:00h	Fishery Management and Threat to Conservation	Renato, Alfonso
10/06 09:00–12:00h	Local Ecological Knowledge and Citizen Science	Renato, Alfonso

Recommended bibliography:

Drew, J. A. (2005). Use of traditional ecological knowledge in marine conservation. Conservation biology, 19(4), 1286-1293.
Jefferson, R., McKinley, E., Capstick, S., Fletcher, S., Griffin, H., & Milanese, M. (2015). Understanding audiences: making public perceptions research matter to marine conservation. Ocean & Coastal Management, 115, 61-70.
Kelly, R., Fleming, A., Pecl, G. T., von Gönner, J., & Bonn, A. (2020). Citizen science and marine conservation: a global review. Philosophical Transactions of the Royal Society B, 375(1814), 20190461.
Knowlton, N. (2021). Ocean optimism: Moving beyond the obituaries in marine conservation. Annual Review of Marine Science, 13, 479-499.
Lundquist, C. J., & Granek, E. F. (2005). Strategies for successful marine conservation: integrating socioeconomic, political, and scientific factors. Conservation Biology, 19(6), 1771-1778.
Ray, G. C., & McCormick-Ray, J. (2013). Marine conservation: science, policy, and management. John Wiley & Sons.
Parsons, E. C. M., Favaro, B., Aguirre, A. A., Bauer, A. L., Blight, L. K., Cigliano, J. A., ... & Sutherland, W. J. (2014). Seventy-one important questions for the conservation of marine biodiversity. Conservation Biology, 28(5), 1206-1214.
Refulio-Coronado, S., Lacasse, K., Dalton, T., Humphries, A., Basu, S., Uchida, H., & Uchida, E. (2021). Coastal and marine socio-ecological systems: A systematic review of the literature. Frontiers in Marine Science, 8, 648006.
Rees, S. E., Foster, N. L., Langmead, O., Pittman, S., & Johnson, D. E. (2018). Defining the qualitative elements of Aichi Biodiversity Target 11 with regard to the marine and coastal environment in order to strengthen global efforts for marine biodiversity conservation outlined in the United Nations Sustainable Development Goal 14. Marine Policy, 93, 241-250.
Ruckelshaus, M. H., Jackson, S. T., Mooney, H. A., Jacobs, K. L., Kassam, K. A. S., Arroyo, M. T., & Ouyang, Z. (2020). The IPBES global assessment: pathways to action. Trends in Ecology & Evolution, 35(5), 407-414.