

**Code: ECO510043**

**Course:** Photography in research and Scientific outreach<sup>1</sup>

**Credits:** 04

**Total hours:** 60

**Instructor:** Dr. Áthila Bertoncini (athilapeixe@gmail.com)

**Semester/Year:** 2/2022

**Schedule:** Sep 12<sup>th</sup> 2022 – Oct 28<sup>th</sup> 2022 (details below)

**Timetable:** 9:00 to 12:00 and 14:00 to 17:00 (details below)

**Vacancy:** 15

**Lectures:** ECZ UFSC

**Lecture environment:** In person classes with outside moments for practices.

**Timetable and students:** In person classes (details below).

**Prerequisites:** Any digital camera (since de first day) and a notebook are desirable.

**Syllabus:**

To introduce students in the photographic technology and terminologies, to visit the essentials of photography; to recognize the resources available at students' camera and different applications; to recognize examples of use and applicability of nature photography in land/underwater; to study composition techniques and image aesthetics; image treatment and management of an image bank for research purposes.

**Methods:**

In person classes. Talks, debates, discussions and working/studying groups. Themes will be exposed with audio-visual elements, mixing theoretical and practical classes, with exercises with cameras and computer. This course is intended to create a mindset for documenting field work and data gathering, understanding the student's camera functions, techniques, treatment, management and archiving to deliver desired results, to be used in reports, publications and, congress posters. Focus will be given to nature photography aiming scientific outreach. A vast bibliographical material will be available for students to prepare their seminars. The end of the course a joint photographic exhibit is planned.

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<sup>1</sup> The learning plan may be adapted, exceptionally, to replace in person classes for virtual classes, while the pandemics of COVID-19 remains, attending the Ordinance of MEC 344, of June 16<sup>th</sup>, 2020 and the Resolution 140/2020/CUn, of July 24<sup>th</sup>, 2020.

**Exam:**

Frequency at classes, participation and feedback along exercises; interaction and discussion along the classes and seminars and involvement in exhibit preparation.

**Program and Schedule:**

Date	Time	Instructor	Topics
12/9 (MON)	09:00 -12:00	Áthila	Introduction, equipment, research lines
14/9 (WED)	09:00 -12:00	Áthila	Photographic language and practice
14/9 (WED)	14:00 - 17:00	Áthila	Image bank and treatment ( <i>Lightroom</i> )
19/9 (MON)	09:00 -12:00	Áthila	Photographic language and practice
21/9 (WED)	09:00 - 12:00	Áthila	Photographic language and practice
21/9 (WED)	14:00 - 17:00	Áthila	Image bank and treatment ( <i>Lightroom</i> )
28/9 (WED)	09:00 -12:00	Áthila	Photographic language and practice
28/9 (WED)	14:00 - 17:00	Áthila	Image bank and treatment ( <i>Lightroom</i> )
3/10 (MON)	14:00 -17:00	Áthila	Underwater photography practice (pool)
11/10 (TUE)	All day	Áthila	Field trip + Seminars
25/10 (TUE)	All day	Áthila	Field trip + Seminars
27/10 (WED)	10:00 -12:00	Áthila	Field images treatment ( <i>Lightroom</i> )
28/10 (FRY)	10:00 -12:00	Áthila	Field images treatment and exhibit assembling

**Basic Literature and links of interest:**

Articles, internet websites and reference materials will be selected and posted in the learning virtual environment.

AW, Michel 2006. An Advanced Guide to Digital Underwater Photography. 1<sup>st</sup> ed. Ocean Environment, Carlingford, Australia. 132 p.

AW, Michel 2007. An Essential Guide to Digital Underwater Photography. 2<sup>nd</sup> ed. Ocean Environment, Carlingford, Australia. 128 p.

ALMEIDA, M. J. P. M. Linguagens, Leituras e Ensino da Ciência. Campinas: Mercado das Letras; ALB, 1998.

ARAÚJO, E. S. N. N; CALUZI, J. J; CALDEIRA, A. M. A. 2006. Divulgação científica e ensino de Ciências: estudos e experiências. São Paulo: Escrituras, 254p.

Colombini, F. 2009. Fotografia de Natureza Brasileira. Guia Prático. 250p.

Edge, Martin 2006. The Underwater Photographer – Digital and Traditional techniques. 3<sup>rd</sup> ed. Focal Press, Burlington, MA, USA. 407 p.

Gates, Larry 2010. The Beginners Guide to Underwater Digital Photography. Amherst Media, Buffalo, NY, USA. 129 p.

MASSARANI, L; et al. Guia de divulgação científica [editores David Dickson, Barbara Keating], Rio de Janeiro: SciDev.Net: Brasília, DF: Secretaria de Ciência e Tecnologia para a Inclusão Social, 2004.

PINTO, Gisnaldo, Amorim. (Org). Divulgação Científica e Práticas Educativas. 1 Ed. Curitiba: Editora CRV, 2010. 209p.

MUSTARD, A. 2016. Underwater photography Masterclass. Ammonite Press; 192p.

ZAMBONI, L. M. S. Cientistas, jornalistas e a divulgação científica: subjetividade e heterogeneidade no discurso da divulgação científica. Campinas: Autores Associados, 2001.