

Code: ECO410065¹

Course Title: Field Ecology

Credits: 6 credits

Class Hours: 120 hours of theoretical and practical instruction

Instructors: Dr. Eduardo Giehl (2 credits), Dr. Luiz Pinho (3 credits), Dr. Selvino Neckel (2 cr)

Participating Faculty: Faculty from the UFSC Graduate Program in Ecology

Collaborating Postdoctoral Fellows: Dr. Daniel Dutra Saraiva, Dr. Rafael Barbizan Sühs

Semester/Year: 2nd semester of 2026

Dates (subject to change): November 3–13

Schedule: every day during the period and one additional day (two hours) for prior organization

Number of positions: 20

Class location: preparatory and final sessions in a CCB classroom (to be determined).
Field activities at the Chácara Edith RPPN, Brusque, SC.

Office hours and location: in the field

Prerequisites: Population Ecology, Community and Ecosystem Ecology

Syllabus:

Fieldwork, conducted in groups and/or individually, under the guidance of experts. Emphasis on experimental design; data collection and analysis in the field and/or laboratory experiments, discussion of results, oral and written presentations.

Teaching method:

A project-based approach will be used, in which each student will participate in two supervised projects and one independent project. Three days of work will be allocated for each supervised project: 1 day for conducting fieldwork and presenting preliminary results (pilot study) and two days for completing data collection and the final presentation of the work, including a discussion of concepts and results. Students will be organized into working groups to carry out the guided projects, so that several guided projects will be developed simultaneously, with at least one faculty member in charge. Throughout the course, each student must propose ideas for an independent project to be

¹ Translated with [DeepL.com](https://www.DeepL.com) (free version)

carried out in the final block of the course, which may be conducted individually or in pairs. Prior to the fieldwork period, there will be at least one meeting to prepare field logistics and materials.

Assessment:

Students will be assessed based on their participation in the projects carried out and the quality of the reports produced and presented at the end of each practical project. In addition, each student must complete a final project, which must be done in pairs. All reports must be written in the form of a scientific article.

Course Content and Schedule (subject to minor changes):

October 13–16 (date and time to be determined) – Two-hour preparatory meeting to form groups and assign organizational tasks
November 3, 2026 – Bus departure from UFSC to the site; site reconnaissance, lecture/discussion on sampling design, and presentation of ideas for the first guided projects
November 4, 2026 – Pilot data collection, analysis, and presentation of preliminary results; discussion of adjustments for the continuity of the first project
November 5 and 6, 2026 – Data collection, analysis, writing, and presentation of results for the first supervised project
November 7, 2026 – Pilot data collection, analysis, and presentation of preliminary results; discussion of adjustments for the continuity of the second project
November 8 and 9, 2026 – Data collection, analysis, writing, and presentation of results for the second supervised project
November 10–12, 2026 - Execution of independent projects, with presentation of results on November 12
11/13/26 – Return to UFSC

Main Bibliography

Articles on Ecology accessed via the CAPES Journals portal

Additional Bibliography

BEGON, M. & MORTIMER, M. 1990. Population ecology: A unified study of animals and plants. 2nd ed., Blackwell Scientific Publications, Oxford.
BEGON, M., HARPER, J.L., TOWSEND, C.R. 1996. Ecology: Individuals, populations and communities. 3rd ed. London: Blackwell

- BORCARD, D., GILLET, F. & LEGENDRE, P. Numerical Ecology with R. Cham: Springer International Publishing, 2018.
- BROWER, J. E., ZAE, J.H. & VON ENDE, C. N. 1997. Field and laboratory Methods for general Ecology. McGraw-Hill, Columbus.
- GOTELLI, N.J. & ELLISON, A.M. **A primer of ecological statistics**. Sinauer Associates Sunderland, 2004.
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- KREBS, C.J. 1989. Ecological methodology. Harper Collins Publishers New York. -
- LUDWIG, J.A. & REYNOLDS, J.F. 1988. Statistical ecology: A primer on method and computing. John Wiley & Sons, New York.
- MAGURRAN, A. 2003. Measuring Biological Diversity. Blackwell, Oxford. -
- SCHRADER FRECHETTE, K.S. & MCCOY, E.D. 1995. Method in ecology: Strategies for conservation. Cambridge University Press, Cambridge.
- SOKAL, R.R. & ROHLF, F.J. 1995. Biometry: The principles and practice of statistics in biological research. 3rd.ed. W.H. Freeman and Company, New York. -
- VERHOEF, H.A. & MORIN, P.J. Community Ecology. 2010. Processes, Models and Applications. Oxford University Press.
- ZUUR, Alain F. et al. 2009. Mixed effects models and extensions in ecology with R. New York, NY: Springer.