

Direzione Ricerca, Innovazione e Internazionalizzazione

ID

VP 201 TER

Visiting Professor Program Academic Year 2025/2026

TEACHING COMMITMENT: 12 hours

COURSE TITLE

Biological Invasions in Freshwater Ecosystems (Within the Course "Biomonitoring and Management of Inland Waters")

TEACHING PERIOD

II semester

SCIENTIFIC AREA

Ecology

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

Inland waters are among the most endangered ecosystems globally, with biological invasions representing one of the main contemporary pressures on their floral and faunal communities. These invasions lead to varied and sometimes unexpected effects on local economies, human well-being, biodiversity, and water chemistry. The challenges associated with invasive species are particularly pronounced in aquatic environments, highlighting the need for more research and professionals to address these heterogeneous topics.

The course will examine the entire invasion process through a combination of theoretical insights and discussions, including management approaches, tools, and policy strategies, supported by case studies from around the world.

LEARNING OBJECTIVES

The objective of this short visit and course is to enhance understanding of the ecology, management, and policy related to species invasions in freshwater ecosystems. This will be accomplished through a combination of theoretical insights and discussions that examine the entire invasion process to address these emerging challenges.

Specific aims of the session will include:

- 1. To introduce the background and main concepts of 'biological invasions' and 'invasive species' in freshwater ecosystems;
- 2. To describe challenges and implications that biological invasions pose to contemporary river ecology and sustainable management;
- 3. To recognize and develop awareness on some of the most common invasive species within rivers in Italy and Europe.

OTHER ACTIVITIES BESIDE THE COURSE

One seminar for the BBA PhD course

One field trip in the Piemonte region.

VISITING PROFESSOR PROFILE

The ideal candidate should demonstrate international experience and leadership (through contracts or collaborations with leading research centers abroad) in freshwater ecology and aquatic monitoring. Fluency in at least two European Union languages is preferred. Ecologist with a strong publication record on biological invasions in rivers and lakes.

CONTACT REFERENT

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