### Georg-August-Universität Göttingen

## Module SK.Biodiv.338: Know your species! Biodiversity recording in a digital citizen-science era

3 C 3 WLH

#### Learning outcome, core skills:

Species identification skills are a cornerstone of ecology and conservation. Survey approaches are changing rapidly: Al-based methods in combination with citizen-science online databases gain importance, but classical approaches remain indispensable for most taxonomic groups. This course offers an in-depth introduction to the identification and ecology of selected taxa, complementary to B.Biodiv.331. It combines fieldwork, data-based work and collection techniques. It will focus on the opportunities and limits of identification via citizen-science online tools such as iNaturalist or observation.org, and will introduce students to collection and preparation techniques.

At the end of the course the participants will be able to critically judge the use of AI tools, will have acquired skills to catch, handle and prepare voucher specimens in some groups, and will be ready to continue species surveys independently.

#### Workload:

Attendance time: 42 h

Self-study time:

48 h

3 WLH

#### Course: SK.Biodiv.338.LV Know your species!

#### Contents:

After an introductory event about Species collections in the Biodiversity Museum each student need to select and pass two of the identification and ecology practices (each running for ca. 4 days) from the following:

- · Selected plant families
- · Land snails (Gastropoda)
- Spiders (Araneae)
- · Bees and wasps (Aculeata)
- Butterflies and moths (Lepidoptera)
- Crickets and grasshoppers (Orthoptera)
- · Leafhoppers and allies (Auchenorrhyncha)
- True bugs (Heteroptera)
- · Other taxa and species groups depending on lecturer availability

# Examination: Portfolio: Database file evidencing the successful identification of a minimum number of specimens/individuals and flawless data entry, not graded SK.Biodiv.338.Mp: Know your species! Biodiversity recording in a digital citizen-science era

#### **Examination requirements:**

Participants will need to be familiar with key identification features and will need to understand how to use field guides, taxonomic keys and online AI tools for identification.

	Recommended previous knowledge: SK.Biodiv.337
Language:	Person responsible for module:
German, English	Dr. Florian Goedecke
	Prof. Dr. Johannes Kamp

Course frequency: each summer semester	Duration: 1 semester[s]
Number of repeat examinations permitted: twice	Recommended semester: 4 - 6
Maximum number of students: 40	