

Georg-August-Universität Göttingen
Bachelor-Studiengang Geowissenschaften

B.Geo.707

“An Introduction to Molecular, Phylogenetic and DNA Barcoding Methods “

Learning objectives, competencies and testing requirements:

With rapid advances in DNA sequencing technologies molecular data is becoming more and more relevant to many fields of modern science. This course will provide students with an introduction to basic molecular procedures including genomic DNA extraction, PCR amplification and purification, DNA sequencing and sequence analysis with a variety of bioinformatic tools.

As an exercise we will collect a variety of invertebrates from local Göttingen habitats, and we will sequence a so called "DNA barcode" gene from each of these. In theory this barcode has the potential to uniquely identify every species on the planet. In this course we will test that theory.

Students should have a basic understanding of biology but previous molecular experience is not necessary. The course will be held in English, so students should have the ability to understand, read and write in English.

Credits/SWS insgesamt

3/2

Lehrveranstaltungen und Prüfungen

V/Ü 'An Introduction to Molecular, Phylogenetic and DNA Barcoding Methods'
 Jackson, D.J.

Modulprüfung:
 Course participation (60%), poster presentation (40%).

Credits/SWS Einzel

3/2

Wahlmöglichkeiten

Wahl

Zugangsvoraussetzungen

Keine (none)

Wiederholbarkeit

zweimalig

Verwendbarkeit

Bachelor-und Master-Studiengang
 Geowissenschaften, Geowissenschaften als
 Nebenfach, Promotionsstudierende

Angebotshäufigkeit

Semesterlage

Sommersemester

Dauer

1 Semester

Sprache

Englisch (english)

Maximale Studierendenzahl

10

Modulverantwortliche/r (Stellvertreter/in)

Jackson, D.J.