

# Module P.GRK2300.D6: The Economics of Mixed Forests (2024)

## Module content (according to the module catalogue)

### Learning outcome core skills

By the end of this course the students shall be able to build basic bio-economic models to investigate economic consequences of species admixture. To this end, they shall gain basic knowledge in economic theory needed for a sound analysis of mixed forests. Students shall be able to critically assess economic valuation of mixed forests in their own research and in the scientific literature.

#### **Course: The Economics of Mixed Forests**

Contents: The seminar will first provide an overview on economic theory related to mixed forests. Theoretic input will be accompanied by practical exercises based on Excel and R. Individual exercises shall finally allow for building a simple bio-economic model for example stands. Based on this knowledge students shall critically analyze and discuss the methods used in selected scientific articles related to the economics of mixed forests.

Literature: Pretzsch, Forrester, Bauhus (eds) (2017): Mixed-species forests. Ecology and Management, Springer.

Examination: Oral Presentation (approx. 20 minutes), not graded

Examination requirements: Understanding of basic economic theories and concepts in forest economics and basic abilities in building a bio-economic model in Excel or R. The results are presented in a final colloquium where students demonstrate the ability to critically discuss economic methods applied in interdisciplinary research (own research topics and/or published journal articles).

Lecturer: Prof. Carola Paul (Department of Forest Economics and Land-use Planning)

**Dates:** November 5, 1-4 pm

November 6, 1-4 pm November 27, 1-4 pm

Place Meeting room of the Department of Forest Economics and Land-use Planning,

Büsgenweg 3

**Credits:** 2 ECTS (attendance of at least 80 % and oral presentation)

Language of instruction is English

# Detailed schedule/teaching concept

# 3 blocked sessions

- Session 1: Introduction to relevant (basic) economic theory
  - Benefit/Cost analysis of forest stands
  - Investment Theory applied to forest stands and examples
  - Forest Valuation Theory

Examples and Papers for review at home

- Session 2: Introduction to economic theory relevant for mixed forests
  - Portfolio Theory
  - Valuation of ecosystem services
  - Multi-criteria approaches
- Session 3: Own Research ideas
  - Paper workshop on economic analyses of mixed forests
  - Brainstorming on own integrative paper ideas

**Registration:** Please register by sending an email to <u>serena.mueller@forst.uni-goettingen.de</u> by Monday, November 4, 2024.