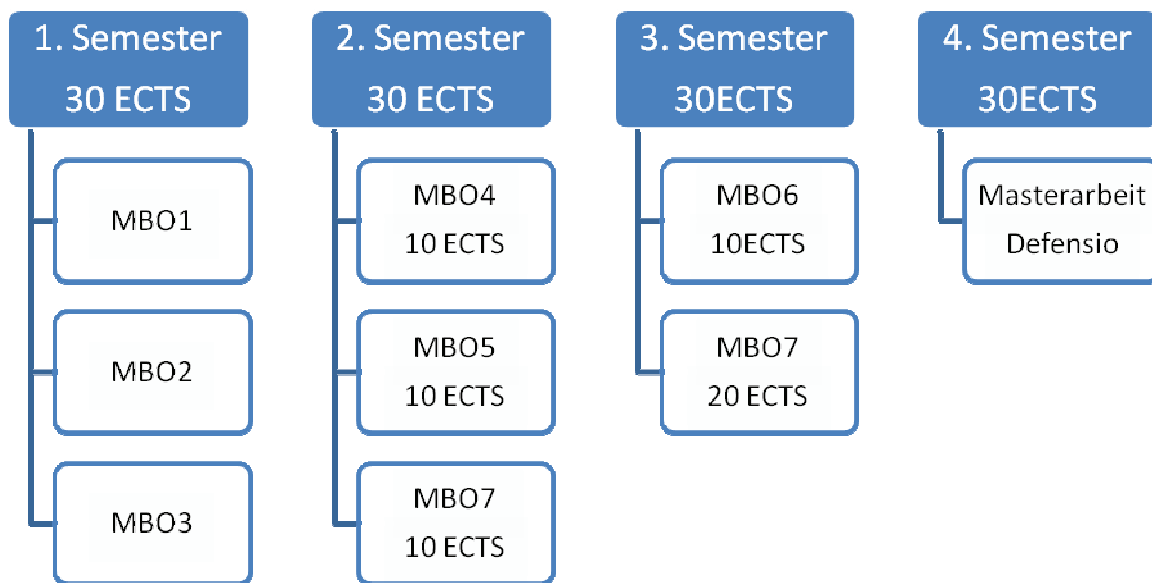


## Anhang 1

### Empfohlener Pfad durch das Studium

Wie in der Grafik ersichtlich, wird der Besuch der Pflichtlehrveranstaltungen aus den Modulen MBO1-3 für das erste Semester empfohlen. Quereinsteiger im Sommersemester haben die Möglichkeit, die Pflichtübungen aus MBO4 zu besuchen und parallel dazu ergänzende Lehrveranstaltungen aus dem Modul MBO7 zu absolvieren. Das Modul MBO4 gibt einen guten Einblick in die Methodenvielfalt der Botanik und erleichtert die Wahl eines Schwerpunktes für die Masterarbeit. Die Lehrveranstaltungen des Wahlmoduls MBO7 können während der gesamten Studiendauer ohne Voraussetzungen besucht werden. Allerdings ist zu beachten, dass ein Teil des Moduls MBO7 der Masterspezialisierung dient und daher erst nach Wahl des Masterthemas besucht werden sollte.



## Anhang 2- Annex: Information in English

The curriculum comprises 120 ECTS, arranged in 7 obligatory modules named MBO1-7, the final master thesis and the Defensio. The names of the modules and their arrangement are given in the Table below. For more details and the suggested path of your studies, please consult the chart in the German part of this Annex. It is highly recommended to follow this path. You might find some courses of MBO7 helpful already in the beginning, but be aware that MBO7 is designed to complement primarily the topic of your master thesis.

| Modules | Title of Module                              | ECTS   |
|---------|--|--------|
| MBO1    | Systematic and Evolutionary Botany           | 10     |
| MBO2    | Structural Botany                            | 10     |
| MBO3    | Molecular Biology of Plants                  | 10     |
| MBO4    | Basic Methods of Botany                      | 10     |
| MBO5    | Advanced Methods of Botany                   | 10     |
| MBO6    | Specific Research Project                    | 10     |
| MBO7    | Individual Specialization (elective courses) | 30     |
|         | Master Thesis and Defensio                   | 25 + 5 |

The detailed structure of the curriculum is summarized below, with each module being described and credits specified.

Abbreviations used for course types:

- npi= non-continuous assessment courses, meaning you have only one exam at the end of the course
- pi= continuous course assessment, meaning multiple assessments as specified by lecturer during the course
- VO: lecture
- UE, PR: practical course
- EX: excursion
- SE: seminar

|                      |   |                |
|----------------------|---|----------------|
| <b>MBO1</b>          | <b>Systematic and evolutionary botany</b><br><b><i>obligatory</i></b>   | <b>10 ECTS</b> |
| <b>Preconditions</b> | none  |                |
| <b>Aims</b>          | Students are able to recognize and conceptualize processes of evolution acting on the individual and at the population level. They understand processes generating micro- and macro-evolutionary patterns in biogeography and biodiversity. |                |
| <b>Structure</b>     | VO: 5 npi, 8 ECTS<br>SE :1 pi, 2 ECTS   |                |
| <b>Credit</b>        | All courses must be passed to gain credit   |                |

|                      |   |                |
|----------------------|---|----------------|
| <b>MBO2</b>          | <b>Structural Botany</b><br><b><i>obligatory</i></b>  | <b>10 ECTS</b> |
| <b>Preconditions</b> | none  |                |
| <b>Aims</b>          | Students are able to analyze and interpret general structural properties from the morphological down to the ultra-structural level. They have a broad knowledge of structural diversity, particularly among vascular plants. In addition, they understand structural features in relation to the functional properties and to the evolutionary history of the organisms considered. |                |
| <b>Structure</b>     | VO: 5 npi, 8 ECTS<br>SE :1 pi, 2 ECTS   |                |
| <b>Credit</b>        | All courses must be passed to gain credit   |                |

|                      |   |                |
|----------------------|---|----------------|
| <b>MBO3</b>          | <b>Molecular biology of plants</b><br><b><i>obligatory</i></b>  | <b>10 ECTS</b> |
| <b>Preconditions</b> | none  |                |
| <b>Aims</b>          | Students are able to understand principles of plant genomics, primary and secondary metabolism and molecular principles of physiology, development and plant-environment-interactions. They have a broad knowledge about biotic and abiotic stress physiology of plants. Students develop knowledge about molecular principles of plant evolution, ecology and diversity. Students intensify their understanding of net primary producers on earth. |                |
| <b>Structure</b>     | VO: 5 npi, 8 ECTS<br>SE :1 pi, 2 ECTS   |                |
| <b>Credit</b>        | All courses must be passed to gain credit   |                |

|                      |  |                |
|----------------------|--|----------------|
| <b>MBO4</b>          | <b>Basic Methods of Botany</b><br><b><i>obligatory</i></b>   | <b>10 ECTS</b> |
| <b>Preconditions</b> | none   |                |
| <b>Aims</b>          | Students are able to apply basic methods in botanical research, and they have good knowledge and skills in the fields of systematic and evolutionary botany, structural botany, and molecular biology of plants. |                |
| <b>Structure</b>     | UE 8 pi, 10 ECTS   |                |
| <b>Credit</b>        | All courses must be passed to gain credit  |                |

|                      |  |                |
|----------------------|--|----------------|
| <b>MBO5</b>          | <b>Advanced Methods of Botany</b><br><b><i>obligatory</i></b>  | <b>10 ECTS</b> |
| <b>Preconditions</b> | none   |                |
| <b>Aims</b>          | Students have deep and advanced knowledge in both theory and in practical applications. They are able to apply these methods in a hypothesis-oriented way in the selected field of their master thesis. Students are fit to communicate their results. |                |
| <b>Structure</b>     | UE/SE/EX pi, 6 SSt; 10 ECTS  |                |
| <b>Credit</b>        | All courses must be passed to gain credit  |                |

|                      |   |                |
|----------------------|---|----------------|
| <b>MBO6</b>          | <b>Specific research project</b><br><b><i>obligatory</i></b>  | <b>10 ECTS</b> |
| <b>Preconditions</b> | None; completion of MBO1-4 is recommended   |                |
| <b>Aims</b>          | Students are able to independently design and conduct a research project, including the search for relevant literature, formulation of testable hypotheses, and application of analytical or statistical methods in a novel context, the structuring of experimental or laboratory procedures, data gathering and data analysis, as well as presentation and discussion of the results. |                |
| <b>Structure</b>     | UE/SE/EX Pi, 6 SSt; 10 ECTS   |                |
| <b>Credit</b>        | All courses must be passed to gain credit   |                |

|                      |   |                |
|----------------------|---|----------------|
| <b>MBO7</b>          | <b>Individual Specialization (elective courses)</b><br><b><i>obligatory</i></b>   | <b>30 ECTS</b> |
| <b>Preconditions</b> | None; completion of MBO1-3 is recommended   |                |
| <b>Aims</b>          | <p>Students have in-depth knowledge regarding concepts, hypotheses and theories in the field of their master thesis, complemented by knowledge from associated biological and non-biological disciplines. Thus, they are able to interpret and discuss the results of their research in a broader context.</p> <p>Selections may be made from</p> <ol style="list-style-type: none"> <li>1) Courses from Botany modules that have not yet been taken, or those from other master studies in Biology such as Molecular Biology, Genetics, Ecology and Ecosystems.</li> <li>2) Scientific knowledge from other fields of natural sciences such as Pharmacy, Environmental Sciences, Chemistry, Physics, Geology.</li> <li>3) General supplementary qualifications such as presentation techniques, informatics, statistics, management of literature data.</li> </ol> |                |
| <b>Structure</b>     | You may select from continuous and non-continuous assessment courses, which have been specified for this module. Taken together, gained credits must amount to 30 ECTS.   |                |
| <b>Credit</b>        | All courses must be passed to gain credit   |                |

