



## **Humboldt** reloaded | guidelines

### *Humboldt reloaded* undergraduate research projects

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This guideline aims to provide the framework and learning objectives of undergraduate research projects within [Humboldt reloaded](#). The aim of *Humboldt reloaded* is to introduce students to scientific working at the very beginning of their studies and to stimulate their interest in research. Within the research projects students work within small teams and address current research topics and actual research questions.

Each *Humboldt reloaded* project (HR project) can focus on different learning objectives and components of the research process and can be experimental as well as theoretical. The students should acquire basics and competences within the field of scientific working at the beginning of their studies which they can later successfully apply, e. g. in their Bachelor and Master thesis.

#### **Components and learning objectives of the research projects:**

##### **Elaborate the state of the science**

Students of the first bachelor semesters often have little experience in searching and analysing primary literature or data required to work scientifically. Therefore, this part constitutes an important component of HR projects. Ideally, students should be able to identify open research questions after successful literature work.

##### **Research questions and hypotheses**

A clear research question and the corresponding hypotheses represent the basis of scientific work. As the main topic of the HR projects is already defined by the project description of the supervisor, students have the task to formulate distinct research questions and hypotheses within this topic, based on the state of the scientific knowledge, guided and supported by their supervisor.

##### **Experimental design**

To test their hypotheses, students have to design an experiment, an investigation or a questionnaire. This learning objective includes important aspects such as elaborating a detailed time schedule, selecting adequate methods or techniques and planning a statistically correct experimental design.

##### **Conducting experiments and investigations**

During their project students implement their study concept, by learning and applying the respective methods. By doing this, students learn to evaluate their results and have to decide how to successfully continue their project.

##### **Data analysis and presentation**

Students often do not collect own data until they conduct their Bachelor thesis. The statistical analysis of data, the evaluation and interpretation of the results based on the current knowledge represent important learning objectives of HR projects. Furthermore, the basics of scientific writing should be acquired during a HR project. For Bachelor students, writing a project or seminar paper is desirable, but not obligatory. For Master students, depending on the faculty affiliation, the writing of either a project proposition, a project report or a seminar paper is obligatory, provided that the students wish to have the project credited with ECTS credits (see below). Obligatory for each *Humboldt reloaded* project is the writing of an abstract of

one page and the design of a poster presenting the project and its results. Details on how to write an [abstract](#) or design a [poster](#) can be found on the *Humboldt reloaded* - Homepage.

Supported and guided by their supervisors, students should be enabled to acquire these learning objectives. Project supervisors can contact the [HR team](#) directly with questions. In addition, the HR team offers workshops on research and project-oriented forms of teaching through the [University Didactics Center](#). Project supervisors can get support on research and project-oriented forms of teaching. For students, the [F.I.T. platform](#) offers courses on time and stress management, dealing with learning and performance blocks, and much more.

HR projects are closely related to the **actual research topics** of the hosting institutes, therefore research projects can optimally create an additional scientific benefit. Accordingly, HR projects offer the opportunity to work on unanswered or newly generated questions. They can also be used for the evaluation of methodological approaches, pilot tests for project proposals, repetitions, personnel-intensive experiments, side aspects. Due to the close relation to current research topics, the motivation of students should be greatly enhanced. Highly motivated and interested students can subsequently be recruited as student assistants or for a Bachelor thesis.

Besides the learning targets mentioned above, it is also important that students acquire social skills during their research projects such as the ability to **accept criticism**, to **work in a team** and to work **self-reliant**. In particular, the last two points mean that students are able to plan and carry out their project independently and can organize the different tasks within a team.

### Target group

The target group is mainly the students of the BSC courses of the faculties between the 3rd and 5th semester. Bachelor students from other semesters are accepted on a subordinate basis. Master's students can participate in HR projects, provided that Bachelor's students also participate in the respective HR project. Projects in which only master's students participate are not funded.

### Group size

A group size of about 2-7 students is desirable. In cases where theoretical or empirical projects surpass a groups size of 5 students, we recommend to build sub groups of maximal 5 students working together.

### Workload for students

The workload for each student should be at least 30 h and should not surpass 180 h (= 6 ECTS). The workload should be dividable into 30 h, 60 h, 90 h, 120 h, 150 h or 180 h, to ensure that respective ECTS points can be easily assigned. In the faculty of economics and social sciences a workload of 180 h is prescribed.

### Credits for Bachelor students

ECTS achieved within a HR project can be considered within a portfolio module, Faculty N and A without scores, in Faculty W with scores. Within a portfolio module (module of choice with 6 ECTS) maximally 6 ECTS can be considered.

### Credits for Master students

Master's students who would like to have an HR project credited with ECTS credits must provide different additional services in the respective faculties and can have these credited in different modules:

In **Faculty N**, master students can have the HR projects credited in the portfolio module. They have to submit either a project proposal or a final project report in paper form as additional performance to the supervisors, who check this additional performance.

In **Faculty A**, master students can receive credit for HR projects in the portfolio module (3000-410). For crediting with 6 ECTS credits, a 20-page project report must be submitted to the supervisors and checked (for fewer ECTS credits, correspondingly fewer pages, see module description Research Internship in the online module catalog). The supervisor determines the requirements for the project report.

In **Faculty W**, master students must submit a seminar paper within the study project to the supervisor, which is assessed at Master's level and therefore requires a more in-depth study of the topic. The study project can be credited as part of the research semester.

A participation without ECTS credits is possible for both Bachelor and Master students.

### **Project administration | Use of funds**

For each project starting in **winter term 2023/24**, **1.500,-€** are available. These funds can either be used by the department as personnel funds or for consumables for the project. The personnel funds can be used to augment the payment of the respective supervising PhD student or to employ additional student assistants, both is not possible for one person and in respective cases an augmentation of the salary is mandatory. Each supervisor can maximally supervise 3 projects at the same time, given that funding is available or if no financial support is needed for the project. Further details on the guidelines are given on Merkblatt 1 „[Personalmittelverwaltung](#)“.

Please note that students that participate in a HR project cannot have a contract for a scientific assistant **for the same project**.

Funding is available until the end of the respective semester (WS: 31.03., SoSe: 30.09.)

### **Consumables**

Details on the guidelines for funding are given in Merkblatt 2 „[Sachmittelverwaltung](#)“. Actual guidelines for the administration of research projects are given on our [Homepage](#).

### **Duration and time schedule**

The duration of the projects (max. 180 h) is determined by the department and can freely be chosen. Projects can be carried out in one block or accompany the semester. The application of the students for HR projects takes place at the beginning of each semester. Projects can start timely after the application during the semester.

Project descriptions can be submitted on the Homepage of [Humboldt reloaded](#). Each year and at the beginning of the winter semester a [students conference](#) takes place. At this conference each project of the preceding year and its results are presented by a poster and an abstract. Selected projects can also be presented as a [talk](#). Abstracts can be submitted until **31<sup>st</sup> August** and files for the posters (pdf) until **30<sup>st</sup> September** at [humboldt-reloaded@uni-hohenheim.de](mailto:humboldt-reloaded@uni-hohenheim.de).

Details on how to write an abstract or design a poster and on the students conference can be found [here](#).

In addition to the abstract maximally two pictures, illustrations or figures can be submitted, which will be printed in the conference proceedings together with the abstract. Note that in case of pictures or illustrations the source has to be provided. To ensure high quality the resolution of the pictures should be at least 300 dpi, file size should be about 2 MB, at least 1 MB.

### **Creditability of *Humboldt reloaded*-Projects for the teaching load**

*Humboldt reloaded* projects can be credited as teaching work load of their supervisors. For this the number of contact hours is divided by the number of weeks during the semester (14) and multiplied by the factor 0,3 is used.

Here an example of a project with 60 h:

$$(60 : 14) \times 0,3 = 1,29 \text{ SWS}$$

Note that persons, who want their *Humboldt reloaded* projects to be credited on their teaching load, have to enter this information into the respective formular besides all other teaching activities.

The [Humboldt reloaded-Team](#) greatly appreciates suggestions and questions