

Module description

Master of Science in the subject Neuroscience
(Examination regulations version 2021)

Third Semester:

Modules 5&6: Research Project I+II

Name of module	Number of module
Research Project I	09LE03MO-NR-1-2021
Responsible	
PD Dr. Philippe Coulon	
Faculty	
Fakultät für Biologie	

ECTS-Points	15.0
Recommended semester	3
Duration	1
Pflicht/Wahlpflicht (P/WP)	compulsory
Workload	450 h
Frequency	each term

Compulsory requirement
Foundations of Neuroscience, Methods in Neuroscience
Recommended requirement
Elective Subjects. Research Projects in some groups may require certain background knowledge and techniques taught in the Elective Subjects.

Assigned Courses					
Name	Type	P/WP	ECTS	HoW	Workload

Qualification
<p>The student</p> <ul style="list-style-type: none"> ■ can carry out a neuroscientific Research Project under the supervision of an experienced researcher ■ can write a scientific report about their Research Project ■ can give a scientific oral presentation about their Research Project ■ can explain the neuroscientific topic of their Research Project

Examination achievement
<p>PL1: Written report (80%) PL2: Oral presentation (20%)</p> <p>Written report The written report should have the form of a short scientific paper, typically including the sections Introduction, Methods, Results and Discussion followed by a list of references. The cover page should contain your name, the title of the research project, the name and affiliation of the supervisor, the starting- and end-date of your project and the date of submission of the report. A typical report is about 5 to 10 pages incl. figures, excl. references and appendix (when using font size 11, single line spacing, a margin of min 1.5 cm all sides). A PDF of your report must be given to the program coordinator in due time (see below).</p> <p>Oral presentation You will give an oral presentation of the results of your Research Project to the corresponding supervisor (typically including the research group of the supervisor).</p> <p>Timeframe Each research project is awarded 15 ECTS, which is equivalent to about 11.25 weeks of full-time work. This includes all preparatory work, lab work, analysis work, report writing as well as preparing and giving the oral presentation. All Research Projects must be finished within 13 weeks after they were started (excluding the Christmas break, if applicable) and you must submit a PDF of your written report to the program coordinator not later than 13 weeks after you started your Research Project. The oral presentation must be given not later than 17 weeks after the start of your Research Project. You will be informed about the two deadlines on the registration/application form after approval of your project.</p>
Course achievement
None
Examination weight
Written report (80%) and oral presentation (20%)
Teaching method
Research methods and specialized knowledge of a neuroscientific research field. The neuroscientific content depends on the topic and laboratory where the student carries out their Research Project.

Recommendation
<p>Two Research Projects are to be passed with two different supervisors. You can choose research projects that match your specific neuroscientific interests. The lectures within the module “Advanced Topics in Neuroscience” you attended in 2nd term gave you an overview of current neuroscience research in Freiburg and can help you in choosing your lab. The organization of research projects is on your own initiative. Please get in contact with your potential future supervisors to discuss potential topics of your projects, as well as the timeline of your project. If you would like to have some advice, we will be happy to assist you in the process of finding a supervisor and a project that matches your interests. Please note that the topic of the research project must always be in the field of neuroscience.</p> <p>“Internal” Research Projects</p> <p>Internal Research Projects are supervised by professors, so-called “außerplanmäßige Professoren” (APL-Prof), junior professors (Jun.-Prof.), “Privatdozenten” (PD) or working group leaders with examination permission, who are members of the University of Freiburg, do research in neuroscience and regularly hold classes in the M.Sc. Neuroscience. Please find below a non-exhaustive list of potential supervisors that fulfil these criteria: Prof. Tonio Ball, Prof. Joschka Boedeker, Prof. Johann Bollmann, PD Philippe Coulon, Prof. Ilka Diester, Prof. Wolfgang Driever, Prof. Ulrich Egert, Prof. Carola Haas, Prof. Ulrich Hofmann, Dr. Nicole Roßkoth-Kuhl, PD Jürgen Kornmeier, Prof. Carsten Mehring, Prof. Friedrich Metzger, Prof. Dierk Reiff, Prof. Stefan Rotter, Prof. Thomas Stieglitz, Prof. Andrew Straw.</p> <p>“External” Research Projects</p> <p>Research Projects can also be supervised by Professors from the University Freiburg that do research in neuroscience but do not teach in the M.Sc. Neuroscience. Moreover, Research Projects can be supervised by Professors from other Universities or scientific research institutions within or outside of Germany, if these Professors are active in neuroscience research. For this type of “external” Research Projects, you are required to submit an application to the examination panel, which has to approve the research project. For details on the application procedure, see the information below. Do not start the Research Project before you have received the approval from the examination panel.</p> <p>Erasmus Program: If you plan to apply for financial support from Erasmus for a Research Project abroad, please note that the Erasmus form can only be signed after the approval of your external Research Project by the examination panel.</p> <p>Before starting a Research Project, it must be registered with the program coordinator and you must have received a written approval of your project. You must not start a Research Project before you have received approval for it. Please note that a Research Project that was started before approval may not be accepted later.</p> <p>Forms for registration of “internal” Research Projects and for applications to the examination panel for “external” Research Project are available on ILIAS. Please fill out the corresponding form, which must be signed by you and your supervisor and submit the form to the program coordinator. Please submit sufficiently early to allow some time for approval, in particular for “external” Research Project where sometimes further clarification is needed.</p> <p>Changes of topic/lab</p> <p>Substantial changes of topics (or even lab changes) must be requested from the examination panel within one week after the start of the Research Project at the latest. If the change of topic/lab is approved, a new date will be set for the start of the Research Project as well as for the submission of the report and the oral presentation. After the change of topic/lab, the full duration of a Research Project will be available again.</p>
Usability
M.Sc. Neuroscience



Name of module	Number of module
Research Project II	09LE03MO-NR-2-2021
Responsible	
PD Dr. Philippe Coulon	
Faculty	
Fakultät für Biologie	

ECTS-Points	15.0
Recommended semester	3
Duration	1
Pflicht/Wahlpflicht (P/WP)	compulsory
Workload	450 h
Frequency	each term

Compulsory requirement
Foundations of Neuroscience, Methods in Neuroscience
Recommended requirement
Elective Subjects. Research Projects in some groups may require certain background knowledge and techniques taught in the Elective Subjects.

Assigned Courses					
Name	Type	P/WP	ECTS	HoW	Workload

Qualification
<p>The student</p> <ul style="list-style-type: none"> ■ can carry out a neuroscientific Research Project under the supervision of an experienced researcher ■ can write a scientific report about their Research Project ■ can give a scientific oral presentation about their Research Project ■ can explain the neuroscientific topic of their Research Project

Examination achievement
<p>PL1: Written report (80%) PL2: Oral presentation (20%)</p> <p>Written report The written report should have the form of a short scientific paper, typically including the sections Introduction, Methods, Results and Discussion followed by a list of references. The cover page should contain your name, the title of the research project, the name and affiliation of the supervisor, the starting- and end-date of your project and the date of submission of the report. A typical report is about 5 to 10 pages incl. figures, excl. references and appendix (when using font size 11, single line spacing, a margin of min 1.5 cm all sides). A PDF of your report must be given to the program coordinator in due time (see below).</p> <p>Oral presentation You will give an oral presentation of the results of your Research Project to the corresponding supervisor (typically including the research group of the supervisor).</p> <p>Timeframe Each research project is awarded 15 ECTS, which is equivalent to about 11.25 weeks of full-time work. This includes all preparatory work, lab work, analysis work, report writing as well as preparing and giving the oral presentation. All Research Projects must be finished within 13 weeks after they were started (excluding the Christmas break, if applicable) and you must submit a PDF of your written report to the program coordinator not later than 13 weeks after you started your Research Project. The oral presentation must be given not later than 17 weeks after the start of your Research Project. You will be informed about the two deadlines on the registration/application form after approval of your project.</p>
Course achievement
None
Examination weight
Written report (80%) and oral presentation (20%)
Teaching method
Research methods and specialized knowledge of a neuroscientific research field. The neuroscientific content depends on the topic and laboratory where the student carries out their Research Project.

Recommendation
<p>Two research projects are to be passed with two different supervisors. You can choose research projects that match your specific neuroscientific interests. The lectures within the module “Advanced Topics in Neuroscience” you attended in 2nd term gave you an overview of current neuroscience research in Freiburg and can help you in choosing your lab. The organization of research projects is on your own initiative. Please get in contact with your potential future supervisors to discuss potential topics of your projects, as well as the timeline of your project. If you would like to have some advice, we will be happy to assist you in the process of finding a supervisor and a project that matches your interests. Please note that the topic of the research project must always be in the field of neuroscience.</p> <p>“Internal” Research Projects</p> <p>Internal Research Projects are supervised by professors, so-called “außerplanmäßige Professoren” (APL-Prof), junior professors (Jun.-Prof.), “Privatdozenten” (PD) or working group leaders with examination permission, who are members of the University of Freiburg, do research in neuroscience and regularly hold classes in the M.Sc. Neuroscience. Please find below a non-exhaustive list of potential supervisors that fulfil these criteria: Prof. Tonio Ball, Prof. Joschka Boedeker, Prof. Johann Bollmann, PD Philippe Coulon, Prof. Ilka Diester, Prof. Wolfgang Driever, Prof. Ulrich Egert, Prof. Carola Haas, Prof. Ulrich Hofmann, Dr. Nicole Roßkoth-Kuhl, PD Jürgen Kornmeier, Prof. Carsten Mehring, Prof. Friedrich Metzger, Prof. Dierk Reiff, Prof. Stefan Rotter, Prof. Thomas Stieglitz, Prof. Andrew Straw.</p> <p>“External” Research Projects</p> <p>Research Projects can also be supervised by Professors from the University Freiburg that do research in neuroscience but do not teach in the M.Sc. Neuroscience. Moreover, Research Projects can be supervised by Professors from other Universities or scientific research institutions within or outside of Germany, if these Professors are active in neuroscience research. For this type of “external” Research Projects, you are required to submit an application to the examination panel, which has to approve the research project. For details on the application procedure, see the information below. Do not start the Research Project before you have received the approval from the examination panel.</p> <p>Erasmus Program: If you plan to apply for financial support from Erasmus for a Research Project abroad, please note that the Erasmus form can only be signed after the approval of your external Research Project by the examination panel.</p> <p>Before starting a Research Project, it must be registered with the program coordinator and you must have received a written approval of your project. You must not start a Research Project before you have received approval for it. Please note that a Research Project that was started before approval may not be accepted later.</p> <p>Forms for registration of “internal” Research Projects and for applications to the examination panel for “external” Research Project are available on ILIAS. Please fill out the corresponding form, which must be signed by you and your supervisor and submit the form to the program coordinator. Please submit sufficiently early to allow some time for approval, in particular for “external” Research Project where sometimes further clarification is needed.</p> <p>Changes of topic/lab</p> <p>Substantial changes of topics (or even lab changes) must be requested from the examination panel within one week after the start of the Research Project at the latest. If the change of topic/lab is approved, a new date will be set for the start of the Research Project as well as for the submission of the report and the oral presentation. After the change of topic/lab, the full duration of a Research Project will be available again.</p>
Usability
M.Sc. Neuroscience

