neu751 - Laboratory Animal Science

Module label
Laboratory Animal Science

Module code
neu751

Credit points
3.0 KP

Workload
90 h
(one week full-time in semester break + flexible time for studying and exam preparation 1 SWS
Lecture total workload 45h: 2h contact / 20h background reading / 23h exam preparation 1 SWS
Supervised exercise total workload 45h: 35h contact / 10h background reading)

Used in course of study
- Master's Programme Biology > Skills Modules
- Master's Programme Neuroscience > Skills Modules

Contact person
Module responsibility
- Christine Köppl

Authorized examiners
- Christine Köppl
- Georg Martin Klump
- Ulrike Langemann
- Arne Nolte

Entry requirements
Skills to be acquired in this module
++ Expt. Methods
+ Independent research
+ Scient. Literature
++ Social skills
++ Interdiscipl. knowlg.
+ Scientific English
++ Ethics

Upon successful completion of this course, students
• know the relevant EU legislation governing animal welfare and are able to explain its meaning
in common language
• understand and are able to critically discuss salient ethical concepts in animal experimentation,
such as the three Rs and humane endpoint.
• have basic knowledge of the biology and husbandry of laboratory animal species held at the
University of Oldenburg (rodents or birds or fish)
• are able to critically assess the needs and welfare of animals without compromising scientific
integrity of the investigation
• have practical skills in handling small rodents or birds or fish
• have profound knowledge of anaesthesia, analgesia and basic principles of surgery.
• have practised invasive procedures and euthanasia.

NOTE: These objectives aim to satisfy the requirements for EU directive A „Persons carrying out
animal experiments“ and EU directive D „Persons killing animals“. We aim to obtain
accreditation by the Federation of European Laboratory Animal Science Associations (FeLaSa) by
2018.

Module contents
Background knowledge is taught using the third-party online platform "LAS Interactive“ which
concludes with a written exam that has to be passed before the practical part. Topics covered are:
• Legislation, ethics and the 3Rs • Scientific integrity • Data collection * • Basic biology of rodents,
birds and fish • Husbandry, and nutrition of rodents, birds and fish • Animal Welfare • Health
monitoring • Pain and distress • Euthanasia Practical procedures will first be demonstrated,
important aspects will then be practiced under supervision by every partipant, on an animal model of
their choice (rodents, birds or fish): • Handling and external examination • Administration of
substances, blood sampling • Euthanasia and dissection • Transcardial perfusion • Anaesthesia and
surgery

Reader’s advisory
"LAS interactive“ internet-based learning platform
Wiley-Blackwell

Links
Language of instruction
English

Duration (semesters)
1 Semester

Module frequency
semester break, every semester

Module capacity
15 (Registration procedure / selection criteria: StudIP, sequence of registration)

Modullevel
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Modulart
je nach Studiengang Pflicht oder Wahlpflicht

Lern-/Lehrform / Type of program
### Vorkenntnisse / Previous knowledge

<table>
<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
<th>Type of examination</th>
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<tbody>
<tr>
<td>Final exam of module</td>
<td>immediately before the practical part</td>
<td>written exam of 90 minutes</td>
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<table>
<thead>
<tr>
<th>Course type</th>
<th>Comment</th>
<th>SWS</th>
<th>Frequency</th>
<th>Workload attendance</th>
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<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>1.00</td>
<td>SuSe and WiSe</td>
<td>14 h</td>
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<tr>
<td>Exercises</td>
<td></td>
<td>1.00</td>
<td>SuSe and WiSe</td>
<td>14 h</td>
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**Total time of attendance for the module**

28 h