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:
++ Expt. Methods
+ Independent research
+ Scient. Literature
++ Social skills
++ Interdiscipl. knowlg.
+ Scientific English
++ Ethics

Skills to be acquired in this module:
- 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 participant, 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

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

Module level: ---
Modulart: je nach Studiengang Pflicht oder Wahlpflicht

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

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<thead>
<tr>
<th>Examination</th>
<th>Time of examination</th>
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<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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<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