**neu750 - Laboratory Animal Science**

**Module label**  Laboratory Animal Science

**Module code**  neu750

**Credit points**  6.0 KP

**Workload**  180 h

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

**Contact person**
- **Module responsibility**  Christine Köppl
- **Authorized examiners**  Alle hier genannten

**Module counseling**
- Ulrike Langemann
- Georg Martin Klump
- Arne Nolte
- Gabriele Gerlach

**Entry requirements**
- Neurosci. knowlg. Expt. methods + Independent research + Scient. literature Social skills
- Interdiscipl. knowlg. Maths/Stats/Progr. Data present./disc. + Scientific English Ethics

Upon successful completion of this course, students will:

- 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 and birds)
- 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 and birds
- 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” for rodents, birds and fish. We aim to obtain accreditation by the Federation of European Laboratory Animal Science Associations (FeLaSa) by mid-2017.

**Module contents**

Background knowledge on:

- 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:

- Handling and external examination of mouse, gerbil, zebra finch, chicken, zebra fish
- Administration of substances, blood sampling
- Euthanasia and dissection
- Transcardial perfusion
- Anaesthesia and surgery

**Reader's advisory**

"LAS interactive“ internet-based learning platform

Blackwell

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<td>Language of instruction</td>
<td>1 Semester</td>
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<td>Module frequency</td>
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<td>In addition to the exam, completion of an assignment is required to pass the module. GV-SOLAS accreditation aimed for in 2016, FELASA in 2017</td>
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<tr>
<td>Examination</td>
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<td>Final exam of module</td>
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| Total time of attendance for the module | 70 h |