1. Modul: [35170] Concentration Laboratory Phonology and Speech Processing

2. Module ID: 052400500

3. Credits Points (CP): 12.0

4. Hours per week in term (sws): 8.0

5. Module Duration: 2 Semester

6. Rotation Cycle: every Semester

7. Language: English

8. Module Responsible: Univ.-Prof. Grzegorz Dogil

9. Lecturers:
   - Univ.-Prof. Grzegorz Dogil
   - Wolfgang Wokurek
   - Katrin Schneider
   - Antje Schweitzer
   - Natalie Lewandowski
   - Katrin Schweitzer
   - Michael Walsh
   - Jagoda Bruni

11. Requirements: Knowledge of phonetics and phonological theory, acoustic phonetics

12. Learning Targets: Advanced knowledge in at least two subareas of laboratory phonology and speech processing; students are able to understand current scientific contributions in the field and apply concepts and methods from laboratory phonetics and speech processing to new problem settings; they are able to relate insights from phonetics and phonology to research questions in computational linguistics and speech technology.

13. Course Contents:
    Selection of courses comprising a total of 8 SWS from at least two subareas of laboratory phonology and speech processing:
    - Speech recognition (2 SWS)
    - Speech synthesis (2 SWS)
    - Experimental phonetics (2 SWS)
    - Laboratory phonology (2 SWS)
    - Language and speech in the human brain: Advanced methods in neurolinguistics and neurophonetics (2 SWS)
    - Probabilistic models of language and cognition (2 SWS)
    - Voice Quality (2 SWS)
    - further courses from the MCL catalogue that are announced for this concentration

14. References/Learning Aids:
    Daniel Jurafsky and James H. Martin, 2008, Speech and Language Processing, An Introduction to Natural Language Processing, Computational Linguistics and Speech Recognition, Prentice Hall
    Paul Taylor, 2009, Text-to-speech synthesis, Cambridge University Press
1. Modul: [35170] Concentration Laboratory Phonology and Speech Processing

Addition to Module title:

15. Course:

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>351701</td>
<td>Speech Technology (Translation not available)</td>
</tr>
<tr>
<td>351702</td>
<td>Experimental Phonetics / Laboratory Phonology (Translation not available)</td>
</tr>
<tr>
<td>351703</td>
<td>Brain, Speech and Language (Translation not available)</td>
</tr>
<tr>
<td>351704</td>
<td>Speech perception and production (Translation not available)</td>
</tr>
<tr>
<td>351705</td>
<td>Miscellaneous Topics (Translation not available)</td>
</tr>
</tbody>
</table>

16. Estimation of Student Workload:

<table>
<thead>
<tr>
<th>Presence Time</th>
<th>Self Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>112h</td>
<td>240h</td>
</tr>
</tbody>
</table>

17a. Study Achievements (Unmarked):

17b. Examination Achievements (Marked):

18. Basic for...:

19. Media Form:

<table>
<thead>
<tr>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tafel, Folienprojektion</td>
</tr>
</tbody>
</table>

20. Exam names and numbers:

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>35171</td>
<td>[35171] Concentration Laboratory Phonology and Speech Processing (Translation not available) ( PL ) mündliche Prüfung Gewichtung: 1.0</td>
</tr>
<tr>
<td>35172</td>
<td>[35172] Vorleistung (Translation not available) ( USL-V ) schriftlich, eventuell mündlich Gewichtung: 1.0</td>
</tr>
</tbody>
</table>

21. Offered by:

Institut für Maschinelle Sprachverarbeitung