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

Addition to Module title:

<table>
<thead>
<tr>
<th>2. Module ID:</th>
<th>052400500</th>
<th>5. Module Duration:</th>
<th>2 Semester</th>
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<td>3. Credits Points (CP):</td>
<td>12.0</td>
<td>6. Rotation Cycle:</td>
<td>every Semester</td>
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<td>4. Hours per week in term (sws):</td>
<td>8.0</td>
<td>7. Language:</td>
<td>English</td>
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<td>8. Module Responsible:</td>
<td>Univ.-Prof. Grzegorz Dogil</td>
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<td>9. Lecturers:</td>
<td>- Univ.-Prof. Grzegorz Dogil</td>
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<tr>
<td></td>
<td>- Wolfgang Wokurek</td>
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<td></td>
<td>- Katrin Schneider</td>
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<td></td>
<td>- Antje Schweitzer</td>
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<td>- Natalie Lewandowski</td>
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<td>- Katrin Schweitzer</td>
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<td></td>
<td>- Michael Walsh</td>
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<td></td>
<td>- Jagoda Bruni</td>
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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

Date: 5. January 2019
1. Modul: [35170] Concentration Laboratory Phonology and Speech Processing

Addition to Module title:

15. Course:
   [351701] Speech Technology (Translation not available)
   [351702] Experimental Phonetics / Laboratory Phonology (Translation not available)
   [351703] Brain, Speech and Language (Translation not available)
   [351704] Speech perception and production (Translation not available)
   [351705] Miscellaneous Topics (Translation not available)

16. Estimation of Student Workload:
   Präsenzzeit: 112h,
   Selbststudium: 240h

17a. Study Achievements (Unmarked):

17b. Examination Achievements (Marked):

18. Basic for...:

19. Media Form:
   Tafel, Folienprojektion

20. Exam names and numbers:
   [35171] Concentration Laboratory Phonology and Speech Processing (Translation not available) ( PL ) mündliche Prüfung Gewichtung: 1.0
   [35172] Vorleistung (Translation not available) ( USL-V ) schriftlich, eventuell mündlich Gewichtung: 1.0

21. Offered by:
   Institut für Maschinelle Sprachverarbeitung