

# Hearing and Speech Sciences, Minor

A minor in Hearing and Speech Sciences will provide in-depth training for undergraduates interested in becoming scientists and/or clinicians in health-related fields. This minor will help stimulate students' interest in hearing and speech as well as increase their opportunities to be admitted to postgraduate programs in audiology, speech-language pathology, biomedical engineering, psychology, neuroscience, medicine and other allied areas.

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Students who major in the School of Social Sciences can overlap up to two courses between their major and this minor.

Requirements for the minor in Hearing and Speech Sciences are met by taking eight courses (32 units) as specified below.

## Hearing and Speech Sciences Minor Requirements

| <b>A. Methodological Foundations (select one course from each category):</b>  |                                                                                                                                                            |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Statistics <sup>1</sup>                                                       |                                                                                                                                                            |
| COGS 10A- 10B- 10C                                                            | Exploratory Data Analysis and Probability and Inference and Statistical Models                                                                             |
| EDUC 15                                                                       | Statistics for Education Research                                                                                                                          |
| MGMT 7                                                                        | Statistics for Business Decision Making                                                                                                                    |
| PUBHLTH 7A                                                                    | Public Health Statistics I                                                                                                                                 |
| SOC SCI 10A- 10B- 10C                                                         | Probability and Statistics in Social Sciences I and Probability and Statistics in Social Sciences II and Probability and Statistics in Social Sciences III |
| SOCECOL 13                                                                    | Statistical Analysis in Social Ecology                                                                                                                     |
| STATS 7                                                                       | Basic Statistics                                                                                                                                           |
| STATS 8                                                                       | Introduction to Biological Statistics                                                                                                                      |
| STATS 120A- 120B- 120C                                                        | Introduction to Probability and Statistics I and Introduction to Probability and Statistics II and Introduction to Probability and Statistics III          |
| Technical Toolbox                                                             |                                                                                                                                                            |
| I&C SCI 31                                                                    | Introduction to Programming                                                                                                                                |
| LSCI 107M                                                                     | Computational Methods for Language Research                                                                                                                |
| LSCI 109                                                                      | Special Topics in Computational Linguistics                                                                                                                |
| MATH 3A                                                                       | Introduction to Linear Algebra                                                                                                                             |
| MATH 113A                                                                     | Mathematical Modeling in Biology I                                                                                                                         |
| STATS 6                                                                       | Introduction to Data Science                                                                                                                               |
| Or an additional class from the Statistics category (listed above).           |                                                                                                                                                            |
| Research                                                                      |                                                                                                                                                            |
| BIO SCI 199                                                                   | Independent Study in Biological Sciences Research                                                                                                          |
| BME 199                                                                       | Individual Study                                                                                                                                           |
| COGS 199                                                                      | Individual Study                                                                                                                                           |
| EDUC 199                                                                      | Individual Study                                                                                                                                           |
| LSCI 153M                                                                     | Experimental Research in Language Science                                                                                                                  |
| LSCI 195A- 195B- 195C                                                         | Language Science Research I and Language Science Research II and Language Science Research III                                                             |
| LSCI 199                                                                      | Independent Study                                                                                                                                          |
| MATH 199A- 199B- 199C                                                         | Special Studies in Mathematics and Special Studies in Mathematics and Special Studies in Mathematics                                                       |
| <b>B. Content Foundations (select at least one course from each category)</b> |                                                                                                                                                            |

|                                                         |                                        |
|---------------------------------------------------------|----------------------------------------|
| Mind and Brain                                          |                                        |
| BIO SCI N110                                            | Neurobiology and Behavior              |
| COGS 160A                                               | Introduction to Cognitive Neuroscience |
| Hearing Science                                         |                                        |
| BIO SCI N147                                            | Hearing and the Brain                  |
| Language Science                                        |                                        |
| LSCI 3                                                  | Introduction to Linguistics            |
| LSCI 10                                                 | Introduction to Phonology              |
| LSCI 51/COGS 56L                                        | Acquisition of Language                |
| LSCI 155/COGS 150                                       | Psychology of Language                 |
| <b>C. Advanced Topics (select at least two courses)</b> |                                        |
| BIO SCI N152                                            | Developmental Neurobiology             |
| COGS 131B                                               | Hearing                                |
| LSCI 116                                                | Introduction to Speech Science         |
| LSCI 117                                                | Introduction to Acoustic Phonetics     |
| LSCI 158/COGS 161                                       | Language and the Brain                 |
| LSCI 169                                                | Special Topics in Language Studies     |

<sup>1</sup> For students with majors within the School of Social Sciences, one statistics course in addition to the School requirement must be completed. For students with majors outside of the School of Social Sciences, at least one statistics course is required. Other statistics courses may be approved for substitution.

- Hearing and Speech Sciences, Minor
- Language Science, B.A.
- Language Science, Ph.D.
- Linguistics, Minor