BACHELOR OF SCIENCE WITH A MAJOR IN COGNITIVE SCIENCE OF LANGUAGE (STEM)

The cognitive science of language, also known as psycholinguistics, is the study of the interplay between language and the psychological/brain processes supporting it.

GW's bachelor of science in cognitive science of language program provides students with scientific skills in areas including research methods, data analysis and processing, and written and oral science communication, as well as focal knowledge in cognitive science, linguistics, neurosciences, psycholinguistics, and communication disorders. Using these skills students learn to generate hypotheses and test predictions about communication and language use, ranging from social (media) habits to individual differences in communication and language impairments. High-achieving students have opportunities to participate in undergraduate research (https://psychology.columbian.gwu.edu/undergraduate-student-research/) and external internships to further apply their knowledge.

The BS curriculum combines well with GW's minor in data science and/or certificate in digital technology.

This is a STEM designated program.

ADMISSIONS

For information about the admission process, including deadlines, visit the Office of Undergraduate Admissions website (https://undergraduate.admissions.gwu.edu/). Applications can be submitted via the Common Application (https://go.gwu.edu/commonapp/).

Supporting documents not submitted online should be mailed to:

Office of Undergraduate Admissions
The George Washington University
800 21st St NW Suite 100
Washington, DC 20052

For questions visit undergraduate.admissions.gwu.edu/contact-us (http://undergraduate.admissions.gwu.edu/contact-us/).

REQUIREMENTS

The following requirements must be fulfilled:

The general requirements stated under Columbian College of Arts and Sciences, Undergraduate Programs (http://bulletin.gwu.edu/arts-sciences/#degreeregulationstext).

Coursework for the major:

Code	Title	Credits
Introductory STEM courses		
Biological sciences		
The following two courses (8 credits):		
BISC 1111	Introductory Biology: Cells and Molecules	
BISC 1112	Introductory Biology: The Biology of Organisms	
Mathematics		
One or both of the following courses (3 or 6 credits):		
MATH 1231	Single-Variable Calculus I	
MATH 1232	Single-Variable Calculus II	
Physical sciences		
Two courses (8 credits), one in Chemistry (CHEM) and one in Physics (PHYS), selected from the following:		
CHEM 1111	General Chemistry I	
CHEM 1112	General Chemistry II	
PHYS 1011	General Physics I	
PHYS 1012	General Physics II	
PHYS 1021	University Physics I	
PHYS 1022	University Physics II	
PHYS 1025	University Physics I with Biological Applications	
PHYS 1026	University Physics II with Biological Applications	
Major requirements		
Quantitative methods		
One or two courses (3 or 6 credits) selected from the following:		
CSCI 1012	Introduction to Programming with Python	
DATS 2102	Data Visualization for Data Science	
DATS 2103	Data Mining for Data Science	
DATS 2104	Data Warehousing for Data Science	
STAT 1053	Introduction to Statistics in Social Science	
or STAT 1127	Statistics for the Biological Sciences	
Gateway courses		

The following six courses (18 credits):	
ANTH 1004	Language in Culture and Society
or SLHS 1071	Foundations of Human Communication
or SLHS 1071W	Foundations of Human Communication
DATS 1001	Data Science for All
SLHS 2101	Research Methods
SLHS 2105	Anatomy and Physiology for Speech, Language, and Hearing
SLHS 2107	Acoustics
SLHS 2106	Neural Substrates of Speech, Language, and Hearing
Psycholinguistics	
The following four courses (11 credits):	
SLHS 2104W	Speech and Language Disorders
SLHS 3108	Introduction to Audiology
SLHS 3131	Language Acquisition and Development
SLHS 3136	Phonetics
Cognitive neuroscience	
One to three courses (3 to 9 credits) selected from the following:	
ANTH 3413	Evolution of the Human Brain
PSYC 2015	Biological Psychology
PSYC 3118	Neuropsychology
PSYC 3122	The Cognitive Neuroscience
SLHS 3116	Brain and Language
Cognitive science	
One or two courses (3 or 6 credits) selected from the following:	
ANTH 3601	Language, Culture, and Cognition
PHIL 2045	Introduction to Logic
PSYC 2014	Cognitive Psychology
SLHS 1072	Culturally Responsive Practices in Human Communication.
SLHS 1084	Perspectives in Deaf Culture
SLHS 2135	Language: Structure, Meaning, and Use
SLHS 3117	Hearing and Perception
SLHS 3133	Autism
Advanced electives	
One or two courses (3 or 6 credits) selected from the following:	
ANTH 3603	Psycholinguistics
or LING 3603	Psycholinguistics
or SLHS 3603	Psycholinguistics
PHIL 3121	Symbolic Logic
PSYC 3119	Cognitive Science in the District
SLHS 3109	Auditory Learning and Aural Rehabilitation
Advanced lab or clinical experience	
One course (3 credits) selected from the following:	
ANTH 3602	Ethnographic Analysis of Speech
ANTH 3995	Undergraduate Research
PSYC 4106W	Research Lab in Sensation and Perception
PSYC 4107W	Research Lab in Cognitive Neuroscience
PSYC 4591	Independent Research
SLHS 4119	Principles and Methods in Speech-Language Pathology
SLHS 4196	Independent Study
Capstone seminar (3 credits)	
SLHS 4118W	Senior Research Seminar in Communication Sciences and Disorders