

# COGNITIVE SCIENCES

## Contact Information

**Cognitive Sciences**  
<https://cogsci.rice.edu/>  
 464 Sewall Hall  
 713-348-4856

**Bartlett D. Moore, IV**  
 Program Director  
[bart4@rice.edu](mailto:bart4@rice.edu)

Researchers in the interdisciplinary field of Cognitive Sciences seek to understand such mental phenomena as perception, thought, memory, the acquisition and use of language, learning, concept formation, and consciousness. Some investigators focus on relations between brain structures and behavior, some work with computer simulation, some use experimental methodology, and others work at more abstract theoretical levels.

## Bachelor's Program

- Bachelor of Arts (BA) Degree with a Major in Cognitive Sciences  
 (<https://ga.rice.edu/programs-study/departments-programs/social-sciences/cognitive-sciences/cognitive-sciences-ba/>)

Cognitive Sciences does not currently offer an academic program at the graduate level.

## Director

Bartlett D. Moore, IV, *Social Sciences*

## Professors

Michel Achard, *Linguistics*  
 Michael D. Byrne, *Psychological Sciences*  
 Patricia DeLucia, *Psychological Sciences*  
 Uriah Kriegel, *Philosophy*  
 Randi C. Martin, *Psychological Sciences*  
 Frederick L. Oswald, *Psychological Sciences*  
 Timothy Schroeder, *Philosophy*  
 Charles Siewert, *Philosophy*  
 Devika Subramanian, *Computer Science*  
 Marina Vannucci, *Statistics*

## Associate Professors

Robert Englebretson, *Linguistics*  
 Simon J. Fischer-Baum, *Psychological Sciences*  
 Caleb Kemere, *Electrical and Computer Engineering*  
 Suzanne E. Kemmer, *Linguistics*  
 Philip T. Kortum, *Psychological Sciences*  
 Nancy A. Niedzielski, *Linguistics*  
 Vincente Ordóñez-Róman, *Computer Science*

## Assistant Professors

Bryan Denny, *Psychological Sciences*  
 Stephanie L. Leal, *Psychological Sciences*

Lan Li, *History*  
 Alexander Morgan, *Philosophy*  
 Michelle Torres, *Political Science*  
 Vaibhav V. Unhelkar, *Computer Science*

## Professors Emeriti

Steven J. Cox, *Computational Applied Mathematics and Operations Research*

Richard E. Grandy, *Philosophy*  
 Don Herrick Johnson, *Electrical and Computer Engineering*  
 Mark Kulstad, *Philosophy*  
 Sydney M. Lamb, *Linguistics*  
 David M. Lane, *Psychological Sciences*  
 James R. Pomerantz, *Psychological Sciences*  
 David J. Schneider, *Psychological Sciences*  
 Stephen A. Tyler, *Anthropology*  
 James Young, *Electrical and Computer Engineering*

## Teaching Professor

David R. Caprette, *BioSciences*

## Assistant Teaching Professor

Jonathan R. Flynn, *BioSciences*

## Lecturers

Louretha Adams, *Psychological Sciences*  
 John Greiner, *Computer Science*  
 Bartlett D. Moore, IV, *Social Sciences*

## Adjunct Faculty

Xaq Pitkow, *Electrical and Computer Engineering*

*For Rice University degree-granting programs:*

To view the list of official course offerings, please see [Rice's Course Catalog](https://courses.rice.edu/admweb/!SWKSCAT.cat?p_action=cata) ([https://courses.rice.edu/admweb/!SWKSCAT.cat?p\\_action=cata](https://courses.rice.edu/admweb/!SWKSCAT.cat?p_action=cata)).

To view the most recent semester's course schedule, please see [Rice's Course Schedule](https://courses.rice.edu/admweb/!SWKSCAT.cat) (<https://courses.rice.edu/admweb/!SWKSCAT.cat>).

## Cognitive Sciences (CSCI)

**CSCI 102 - QUANTITATIVE ANALYSIS FOR SOCIAL SCIENCES: COGNITIVE SCIENCES LAB**

**Short Title:** COGSCI STATISTICS LAB

**Department:** Cognitive Sciences

**Grade Mode:** Standard Letter

**Course Type:** Laboratory

**Credit Hours:** 0

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Lower-Level

**Description:** This lab companion course to SOSC 302: Quantitative Analysis for the Social Sciences involves cognitive science-specific applications of statistical analysis. The lab focuses on the use of software to analyze data from research in the cognitive sciences. Students who enroll in this lab section must also enroll in SOSC 302 during the same semester.

**CSCI 238 - SPECIAL TOPICS****Short Title:** SPECIAL TOPICS**Department:** Cognitive Sciences**Grade Mode:** Standard Letter**Course Type:** Internship/Practicum, Laboratory, Lecture, Seminar, Independent Study**Credit Hours:** 1-4**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Lower-Level**Description:** Topics and credit hours vary each semester. Contact department for current semester's topic(s). Repeatable for Credit.**CSCI 299 - EXPERIENTIAL EDUCATION IN COGNITIVE SCIENCES****Short Title:** EXPERIENTIAL EDUC IN COGSCI**Department:** Cognitive Sciences**Grade Mode:** Satisfactory/Unsatisfactory**Course Type:** Internship/Practicum**Credit Hour:** 1**Restrictions:** Enrollment is limited to students with a major in Cognitive Sciences. Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Lower-Level**Description:** Provides one hour of university credit for faculty-approved internship. Students must obtain approval from Cognitive Sciences program director and must submit an offer letter from the internship provider as well as a letter indicating completion and satisfactory performance. Instructor Permission Required. Repeatable for Credit.**CSCI 340 - METHODS OF COGNITIVE SCIENCE****Short Title:** METHODS OF COGNITIVE SCIENCE**Department:** Cognitive Sciences**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** Cognitive science is a basic science of mental operations in humans, animals, and artificial systems. It is a highly interdisciplinary endeavor that draws on philosophy, psychology, biology, linguistics, and computer science, among other traditional disciplines. This course provides an integrated introduction to the primary empirical methods for studying the human mind. Students will learn how the scientific method is applied to study mental information representation, manipulation, and utilization in natural and artificial cognitive systems. It will teach students to understand and evaluate existing methodological approaches as well as recognize what is necessary to replicate results. Topics include the philosophical foundations of cognitive science, basic methods of cognitive psychology, neuroscience, linguistics, computational modeling, data analysis, and ethical responsibility when conducting cognitive research.**CSCI 390 - SUPERVISED RESEARCH IN COGNITIVE SCIENCES****Short Title:** SUPERV RESRCH COGNITIVE SCI**Department:** Cognitive Sciences**Grade Mode:** Standard Letter**Course Type:** Research**Credit Hours:** 1-3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** Supervised research on topics relevant to the cognitive sciences. Limited to majors in Cognitive Sciences. Instructor Permission Required. Repeatable for Credit.**CSCI 477 - SPECIAL TOPICS****Short Title:** SPECIAL TOPICS**Department:** Cognitive Sciences**Grade Mode:** Standard Letter**Course Type:** Internship/Practicum, Laboratory, Lecture, Seminar, Lecture/Laboratory, Independent Study**Credit Hours:** 1-4**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** Topics and credit hours vary each semester. Contact department for current semester's topic(s). Repeatable for Credit.**CSCI 481 - HONORS PROJECT****Short Title:** HONORS PROJECT**Department:** Cognitive Sciences**Grade Mode:** Standard Letter**Course Type:** Research**Credit Hours:** 1-3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** Independent directed research toward preparation of an undergraduate honors project or thesis. Instructor Permission Required. Repeatable for Credit.

## Description and Code Legend

**Note:** Internally, the university uses the following descriptions, codes, and abbreviations for this academic program. The following is a quick reference:

### Course Catalog/Schedule

- Course offerings/subject code: CSCI

### Department (or Program) Description and Code

- Cognitive Sciences: CSCI

### Undergraduate Degree Description and Code

- Bachelor of Arts degree: BA

### Undergraduate Major Description and Code

- Major in Cognitive Sciences: CSCI

### Undergraduate Major Areas of Specialization Descriptions and Attribute Codes\*

- Area of Specialization in Computation: CSCS
- Area of Specialization in Linguistics: CSLN
- Area of Specialization in Neuroscience: CSNR

- Area of Specialization in Philosophy: CSPH
- Area of Specialization in Psychology: CSPA

**Please Note:** Areas of Specialization are department/program-specific and are not formally recognized academic credentials. Unlike Major Concentrations, Areas of Specialization do not appear on the student's official academic transcript, etc. Students may informally choose to follow more than one Area of Specialization (or pre-specified collections of elective courses), however, when declaring their major they should identify and declare one Area of Specialization with the Office of the Registrar.

## CIP Code and Description <sup>1</sup>

- CSCI Major/Program: CIP Code/Title: 30.2501 - Cognitive Science

\* *Systems Use Only: this information is used solely by internal offices at Rice University (such as OTR, GPS, etc.) and primarily within student information systems and support.*

<sup>1</sup> Classification of Instructional Programs (CIP) 2020 Codes and Descriptions from the National Center for Education Statistics: <https://nces.ed.gov/ipeds/cipcode/>