MISSION
The Cognitive Studies degree program offers an integrative approach to the study of human consciousness and cognitive processing. This interdisciplinary and multidisciplinary program draws from fields including philosophy, computer science, psychology, neuroscience, linguistics, art, biology, and physics. Cognitive Studies emphasized strategies for investigating how real (biological) and artificial (computational) brains individually and cooperatively solve problems, form concepts, process language, interpret visual and other sensory input, and develop understandings of the world. Students in the program will examine how traditional approaches to understanding the mind, with a strong emphasis on philosophical, psychological, and physiological approaches. The degree program includes integrative course at the introductory and advanced levels that draw from, consolidate, and expand the material students have learned in course work from the various contributing disciplines. Central themes include the view of patterns and adaptive pattern-recognition, and non-linear dynamical methods for modeling complex systems. Focus is on the use of language, symbols, and images for representing, manipulating, and communicating knowledge. Students are encouraged to examine issues associated with human/machine interfaces, and will explore basic processes of memory and decision, the relation of thought to action, and recent advances in machine intelligence.

Adequate investigations of these phenomena require a synthesis of skills, methods, and knowledge, and depend on considerable facility with information technology tools and systems. Thus, in addition to their broad-based conceptual analysis of intelligent systems, students will be trained in a diversity of scientific methods and techniques, including rigorous quantitative analysis and effective computer simulations. The program will also help students develop strong skills in using, understanding, and evaluating information to present and convey information clearly and effectively orally, in writing, and in internet-based presentations. Students completing this program will have gained the ability to apply the methods of gathering empirical evidence, developing meaningful simulations, applying rigorous conceptual analysis, to the difficult problem of understanding human consciousness. Students will have learned how to apply interdisciplinary methods to the analysis of complex problems, and to the discovery and development of solutions to such problems. More generally, they will be able to apply these approaches together to enrich their own understanding of the complex world we live in.

The graduate in Cognitive Studies will be prepared to work in fields requiring strong interdisciplinary problem solving skills and depending on contemporary information technologies. Students also will be prepared for entry into graduate program in cognitive science or related fields.

PROGRAM GOALS
- Students should have gained an appreciation of the way in which empirical evidence, simulation, and conceptual analysis work together to enrich their understanding of the cognitive processes underlying intelligence and the ability to solve complex problems.
- Students will have preparation for work in fields utilizing modern information technologies, or for advanced studies in cognitive science and graduate programs concerned with cognitive development of performance.
With critical thinking as the foundation of the program, students are nurtured and encouraged to be life-long learners.

Through senior projects completed by many students, students are working in a variety of organization in the community.

STUDENT LEARNING GOALS/ OBJECTIVES

- As indicated above, we expect students completing this program to have developed the ability to work with empirical evidence, simulation, and conceptual analysis and develop and understanding of the cognitive processes underlying intelligence in order to approach and solve complex problems.
- We expect our graduates to have developed effective problem solving skills grounded in techniques of critical analysis of problems and contexts, appropriate selection of approaches and techniques, careful and methodical application of solutions, and thorough appraisal and evaluation of results.
- Students will have specific background in philosophy, physiological psychology, and nonlinear systems.
- The graduate in Cognitive Studies will have preparation for work in fields using the modern information technologies, or for advanced studies in cognitive science and graduate programs concerned with cognitive development and performance.
- Critical thinking is the foundation of our program.
- Our primary educational goal is for each of our graduates to be life-long learners with the fundamental skills and basic knowledge to effectively apply what they learn.

WHAT DATA WERE COLLECTED AND HOW?

INDIRECT:
- Course Evaluations
- Graduating Senior Survey
- Alumni Survey
- Institutional Data

WHAT RECOMMENDATIONS FOR IMPROVING STUDENT LEARNING WERE MADE?

After reviewing the data it was decided to improve our advising process in Cognitive Studies. This is particularly important for interdisciplinary programs, which draw from a variety of fields.
## COGNITIVE STUDIES: Curriculum Map

<table>
<thead>
<tr>
<th>Objectives with high relevance (H), moderate relevance (M), and low or no relevance (blank) to listed courses. Assessment methods are indicated for high relevance</th>
<th>COGS 2100</th>
<th>COGS 2300</th>
<th>PSYC 3100</th>
<th>PSYC 4400</th>
<th>COGS 3150</th>
<th>COGS 4100</th>
<th>PHIL 3500</th>
<th>ENGL 3750</th>
<th>COGS 4960</th>
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<tbody>
<tr>
<td>Demonstrate quantitative reasoning and analysis</td>
<td>M</td>
<td>H</td>
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<tr>
<td>Demonstrate qualitative reasoning and analysis</td>
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<td>Use models as an aid to derive solutions to theoretical and concrete problems</td>
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<td>Use effective strategies to approach open-ended complex systems from various discipline domains</td>
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<td>Evaluate the effectiveness of methods with respect to specific problem domains</td>
<td>M</td>
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<td>Identify the commonalities and difference in mind/body problems</td>
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<td>Explore and extract information from current events in cognitive science</td>
<td>M</td>
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<tr>
<td>Integrate, refine, and explore in depth particular aspects of learned program material</td>
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