

General Studies Gold Request Form

Consult the [General Studies Request FAQ](#) for more information and quick answers.

New permanent numbered courses must be submitted to the workflow in [Kuali CM](#) before a General Studies request is submitted here. The General Studies Council will not review requests ahead of a new course proposal being sent to the Senate.

Submission Information

College/School

Ira A. Fulton Schools of Engineering (CES)

Department/School

Human Systems Engineering Program
(CAPPSYCH)

Submission Type

Mandatory Review

ASU Request

Is this request for a permanent course or a topic?

Permanent Course

Subject Code

HSE

Course Number

101

Units/Credit Hours

3

Course Information

Enter the course catalog information, found in the [web course catalog](#) or [Kuali CM](#).

Course Title

Introduction to Human Systems Engineering

Course Catalog Description

Introduces basic principles, methods and theories of psychology and applications to engineering problems relevant to human systems. Gives particular attention to the intersection of psychology and engineering. Students learn brain anatomy and physiology, sensation and perception, cognition, social systems and research methods so that they are able to design systems consistent with human capabilities and limitations.

Enrollment Requirements (Prerequisites, Corequisites, and/or Antirequisites)

None

Is this a crosslisted course?

No

Is this course offered by (shared with) another academic unit?

No

If this course or topic already carries a different General Studies Gold (not Maroon) designation than the one being requested, please check this box.

General Studies Gold Designation Request

Requested Designation

Social and Behavioral Sciences (SOBE)

Attach a representative syllabus for the course, including course learning outcomes and descriptions of assignments and assessments.

[HSE101Fall24 - syllabus plus assessment.docx](#)

Social and Behavioral Sciences (SOBE)

Courses in social sciences and behavioral sciences expose students to the systematic investigation of human institutions, relationships, social structures, behavior, emotions, communication, and health. Students will learn about evidence, methods, and approaches that social and behavioral scientists use to analyze, understand, and describe human activities, experiences, and systems. They will learn how social scientists and behavioral scientists conduct research, how they disseminate their findings, and how the findings from social and behavioral science can be used in the pursuit of individual, societal, and policy goals.

Most of the course content should align with the Gold category learning outcomes.

Instructions: In the fields below, state the assignment, project, or assessment that will measure each learning outcome, and provide a description. The description should provide enough detail to show how it measures the learning outcome. If needed, more than one can be identified.

The proposal does not need to include all course assessments that measure a given learning outcome. The provided assessment should include sufficient detail to allow the subcommittee to make their evaluation. When appropriate, the same assessment can be listed for more than one learning outcome (e.g., a culminating project).

You may provide links to a document (Google Drive or Dropbox) that includes the relevant details for the assessment. **Do not provide links to Canvas shells.**

SOBE Learning Outcome 1: Utilize behavioral or social science approaches, qualitative or quantitative, to examine aspects of human experiences or explain social or behavioral phenomena.

Utilize behavioral or social science approaches, qualitative or quantitative, to examine aspects of human experiences or explain social or behavioral phenomena. You will find both qualitative and quantitative approaches to examining human behavior throughout the text and Mindtap activities and the supplementary videos. See especially chapter 2 in the text, the “application” sections in Mindtap,

each of the supplementary videos on methods, and chapters 2-5 in the Don Norman supplemental text.

SOBE Learning Outcome 2: Describe the strengths and limitations of behavioral or social science methods in predicting or understanding human behavior.

Describe the strengths and limitations of behavioral or social science methods in predicting or understanding human behavior. Every module includes balanced presentations of the strengths and limitations of these methods. From the “focus on research” topic in the very first chapter of the primary text, we will be examining what we can infer from the results of psychological science and what limitations the research methods entail. Each of the exams and quizzes contain not just factual material but conceptual questions that often focus on the things that we can and cannot conclude about human behavior.

SOBE Learning Outcome 3: Communicate coherent arguments using evidence drawn from qualitative or quantitative sources.

Communicate coherent arguments using evidence drawn from qualitative or quantitative sources. Each week you will be earning points by discussing the topics in the primary text and the supplementary material, and using this evidence to craft and communicate coherent arguments about how they apply to real world problems (like bad website or product design).

List all course-specific learning outcomes. Where appropriate, identify the associated SOBE learning outcome(s) in brackets (see below for example). Note: It is expected that a majority of course-specific learning outcomes will be associated with a SOBE learning outcome.

1. Learn what Human Systems Engineering is, how it is founded in Psychological Science, and discuss how these perspectives can enrich your own engineering discipline or career goal. [SOBE LO1]
2. Describe the research methods used by human systems engineers and psychological scientists, and introduce the themes of human centered design covered in Don Norman’s “The Design of Everyday Things”. [SOBE LO2]
3. Identify the components of the basic biology underlying human behavior, including broad genetic and evolutionary constraints.[SOBE LO1]
4. Detail how human sensation and perception constrains human performance and explain ways in which it might impact technology use, with special attention to increasing accessibility.[SOBE LO1]
5. Learn about the different states of consciousness, including the “flow” state and how we can engineer our own practice of it.[SOBE LO1]
6. Discriminate among basic principles of learning and conditioning, and generate ideas about how one would design a behavior modification for oneself (e.g. stop smoking, do more yoga, drink more water).[SOBE LO1]
7. Describe the properties of human memory, including how attention facilitates encoding, and explain how Norman’s text argues that these factors should be considered in the design of products. [SOBE LO1]
8. Examine problem solving and intelligence, and learn how big tech firms apply cognitive science design principles to augment cognition.[SOBE LO1, LO2]
9. Discriminate between core processes of human motivation and emotion, and read about Emotional Design.[SOBE LO1, LO2]

- 10. Describe human development across the lifespan, including influential theories of cognitive, moral, and personality development, and how these factors influence accessibility in Human Centered Design.[SOBE LO1, LO2]
- 11. Introduce theories of personality and how this can be measured and related to work performance.[SOBE LO1, LO2]
- 12. Survey core ideas in social psychology and how these illuminate behavior in groups, with a particular focus on resource dilemmas and team performance.[SOBE LO1, LO2]

Provost Use Only

Backmapped Maroon Approval

No Response

Form Submission - Proposer

Submitted for Approval | Proposer

Robert Gray - January 7, 2025 at 6:50 AM (America/Phoenix)

Department Approval

Approved

Cindy Boglin - January 7, 2025 at 8:44 AM (America/Phoenix)

Ann McKenna

Carly Regan

Kurt Paterson

GSC Coordinator Review

Approved

TJ Robedeau - January 7, 2025 at 9:50 AM (America/Phoenix)

April Randall

Assistant Vice Provost Review

Sent Back

Tamiko Azuma - January 7, 2025 at 11:07 AM (America/Phoenix)

For the assessments provided for each learning outcome, please provide examples of prompts/questions from the assessments that demonstrate how they are measuring the student's knowledge. You may include a link to a Google Doc if you prefer. This information will allow the General Studies Council to determine if the provided assessment(s) appropriately measure each learning outcome. If you have any questions, please email me (Tamiko Azuma) at azuma.asu.edu.

Form Submission - Proposer

Submitted for Approval | Proposer

Robert Gray - February 4, 2025 at 5:05 AM (America/Phoenix)

Department Approval

Approved

Cindy Boglin

Robert Gray - February 4, 2025 at 5:05 AM (America/Phoenix)

GSC Coordinator Review

Approved

TJ Robedeau - February 4, 2025 at 8:03 AM (America/Phoenix)

April Randall

Assistant Vice Provost Review

Approved

Tamiko Azuma - February 4, 2025 at 12:54 PM (America/Phoenix)

All required components confirmed.

Pre-GSC Meeting

Approved

TJ Robedeau - February 4, 2025 at 1:13 PM (America/Phoenix)

April Randall

Social and Behavioral Sciences (SOBE) Subcommittee

Acknowledgement Requested

Dawn DeLay

Cara McDaniel

Jen Eden

Emily Mertz - February 25, 2025 at 2:15 PM (America/Phoenix)

Thank you for your proposal. The SOBE Subcommittee recommends Revise and Resubmit. Please provide a specific assessment for each LO. The assessment description should provide enough detail to show how it measures the learning outcome.

General Studies Council Meeting

Waiting for Approval

TJ Robedeau

April Randall

Proposer Notification

Notification

Robert Gray

College Notification

Notification

Shawn Jordan
Amy Riggs
Cindy Boglin
Mike Sever
Tiffany Wingerson
Bob Monahan
Allison Curran
Elizabeth Tripodi
James Collofello
Jeremy Helm
Sergio Quiros