

Human-Centered Design

Co-Director: Janet Davis, Computer Science

Co-Director: Justin Lincoln, Art

Sharon Alker, English

William Bares, Computer Science (on sabbatical, 2023-24)

Sarah Hurlburt, French and Francophone Studies

Michelle Janning, Sociology (on sabbatical, 2023-24)

Daniel Schindler, Theater

The Concentration in Human-Centered Design will provide a framework within which students can learn and apply design thinking to problems across disciplines. Design thinking involves methods and approaches that increase intellectual flexibility and comfort with ambiguity and define and frame issues in ways that allow for a broad array of solutions. Students of human-centered design will experiment with prototypes and artifacts, create iteratively, collaborate within teams, interpret and respond to many forms of data and above all attend to the process of design as well as the end product.

Human-centered design is guided by principles of belonging, inclusivity, and empathy and works to help students respond to essential human and non-human needs that are embedded in unequal and unjust systems and structures. HCD focuses on understanding and creating aesthetic, usable, accessible, and sustainable artifacts, grounded in ethical practices and interrogated within historical, aesthetic, environmental, technological, and cultural contexts. Students will learn to be catalysts in the fields of their choice through application of these principles and will ultimately design a project portfolio that will allow them to synthesize the relationship between their primary major, relevant courses across the curriculum, and their studies in design, as well as showcase their work at Whitman for their lives beyond.

Learning Goals:

Students who complete a concentration in Human-Centered Design at Whitman College will be able to:

- *Understand* design thinking, the ubiquity of design, and human-centered design
- *Create* an artifact through ethical, sustainable, and inclusive design using ethical design research methods
- *Critically examine complex social, aesthetic, and environmental contexts, injustices, and inequalities* that impact, and are impacted by, the design process
- *Collaborate* effectively through engagement with varied audiences
- *Relate design thinking to communities and organizations* where it would be practiced

The Concentration in Human-Centered Design:

- 16-24 credits
- Required courses
 - HCD 101, 497
- Complete an additional 8-16 credits total in each of 4 Deepening areas (see course lists below)
 - at least one of these courses must be at the 300-level.
 - Independent studies cannot count toward this requirement
- Complete a Collaborative Practical Experience

Deepening Courses

As human-centered design at a liberal arts college values cross-disciplinary connections, students will select one 2-4-credit course in each of four areas for a total of 8-16 credits that will deepen their knowledge by allowing them to explore and apply their basic skills in other disciplines. These areas are:

- Understand People
- Understand Artifacts
- Observe and Evaluate
- Design and Make

In collaboration with their advisors, students should choose Deepening Courses that serve their particular design interests and goals. Students must take at least one of these courses at the 300-level. Independent studies may not count towards these requirements.

These courses can count for distribution, majors, or minors at the same time they count in the concentration. Students are encouraged to count major courses towards the Deepening Areas so that the HCD concentration builds on their major, and to build connections by selecting complementary courses from other departments and programs. For some courses, especially ones with high enrollment, majors or minors will have priority. Courses may *not* count towards multiple Deepening Areas within the concentration.

Understand People

Designers must understand human roles, systems, relationships, inequalities, opportunities, values, biases, motivations, ways of organizing, and interactions with nature, technology, and the built environment, among other contexts. For this reason, the concentration requires that students take a 2-4-credit course that deepens their understanding of how and why people today act and believe as they do. Courses in this category may consider the past as a way to understand the present. They might also study human movement and integration with physical environments. The following courses count in this area:

Anthropology all 100, 200, and 300-level classes
Asian and Middle Eastern Studies all 100, 200, and 300-level classes
Classics 139 *Greek and Roman Intellectual History*
Classics 201 *Ancient Greek and Roman Philosophy*
Classics 205 *Women and Nature in the Ancient World*
Classics 221 *Introduction to Ancient and Medieval Political Theory*
Classics 226 *Concepts of Nature in Greek and Roman Thought*
Classics 280 *The "Other" Greece & Rome*
Economics all 100 or 200-level courses
Economics 325 *Game Theory*
Economics 358 *Corporate Finance*
Environmental Studies all 200-level classes except 201, 207, 217, 220, and 260
Gender Studies 100 *Introduction to Gender Studies*
Gender Studies 210 *Problems with Privilege*
Gender Studies 238 *Men and Masculinities*

German Studies 230 *Conceiving and Re-conceiving Race*
History all classes except 160, 180, 224, 254, and 262
Indigeneity, Race, and Ethnicity Studies all 100, 200, and 300-level classes except 230
Politics all 100, 200, and 300-level classes
Religion all 100, 200, and 300-level classes except 115, 217, 224, 236, 307, and 310
Rhetoric, Writing, and Public Discourse/Gender Studies 250 *Rhetoric, Gender, and Sexuality*
Rhetoric, Writing, and Public Discourse 301 *ST: Sensing the Self: Technology in Human Culture*
Rhetoric, Writing, and Public Discourse 330 *Rhetorical Theory and the Human Condition*
Rhetoric, Writing, and Public Discourse 342 *Rhetoric and Capitalism*
Rhetoric, Writing, and Public Discourse 365 *Rhetoric and Violence*
Rhetoric, Writing, and Public Discourse 380 *Rhetorical Bodies*
Sociology 117 *Principles of Sociology*

Sociology all 200 and 300-level classes except 207, 208, 211, and 251
Theater and Dance 125 *Beginning Acting I*
Theater and Dance 126 *Beginning Acting II*

Theater and Dance 130 *Beginning Modern Dance*
Theater and Dance 218 *Embodied Art Practice; Introduction to Somatics*
Theater and Dance 259 *Voice & Movement*

Understand Artifacts

Design thinking is a process of intentional creation. A key component of this process is the study of existing products of human activity and how they become meaningful and how they are contextualized. For this reason, students in the concentration are required to take a 2-4-credit course dedicated to a deep and critical understanding of the value, meaning, and context of designed artifacts. The following courses count in this area:

Art History all classes

Asian and Middle Eastern Studies (AMES) 200

Chinese all 100, 200, and 300-level courses

Classics 130 *Ancient Mythology*

Classics 217 *Classical Foundations of the Nature Writing Tradition*

Classics 224/Art History 224 *Powerful Artifacts: Greece and Rome*

Classics 319 *Landscape and Cityscape in Ancient Rome*

Classics 377/Theater and Dance 377 *Ancient Theater*

English 200 VT: *The Witches of Salem*

English 200 VT: *Wicked Problems*

English 245 *Native American Literature*

English 245 *Introduction to African American Literature*

English 337 VT: *Writing Matters*

English 338 *Restoration and Eighteenth-Century Literature*

English 339 *Romantic Literature*

English 341 VT: *Figures of Newness*

English 349: *American Literature of the Modern and Contemporary Environment*

Film and Media Studies all courses 200-373, except 260 and 360

French and Francophone Studies 250 *La Télé*

French and Francophone Studies 251 *What's in a monument?*

French and Francophone Studies 252

Contemporary Cinema of the Francophone World

French and Francophone Studies 253 *La Chanson*

French and Francophone Studies 325 *French Comics*

Gender Studies 230/Global Literature

230/Indigeneity, Race, and Ethnicity Studies 230 *Unsettling Masculinities in French*

Gender Studies 250/Rhetoric, Writing, and Public Discourse 250 *Rhetoric, Gender and Sexuality*

German Studies 302 *Murder, Mayhem, Madness:*

Crime and Justice in the German-Speaking World
German Studies 303 *German Drama: From the Bourgeois Tragedy to Bertolt Brecht*

German Studies 304 *The German Fairy Tale: From World-Building to Nation-Building*

German Studies 307 *Small Print: Short Forms in German Literature*

German Studies 319/Philosophy 319 *German: Frankfurt School Critical Theory*

Hispanic Studies 143 *U.S. Latinx Literatures and Cultures: An Introduction*

Hispanic Studies 144 *Contemporary Latin American Cinema: An Introduction*

Hispanic Studies 145 *Portraits of a Continent: An Introduction to Latin American Photography*

Hispanic Studies any course 305 or higher except 428

History 160 *Troy and the Trojan War*

History 180 *Antiqui-Tea: Spilling the Ancient Mediterranean*

History 224/Classics 224/Art History 224 *Powerful Artifacts: Greece/Rome*

History 254 *The Social History of Stuff*

History 262 *People/Nature/Technology: North American Landscapes*

Japanese all 100, 200, and 300-level courses

Library 120 *Information and Society*

Music 129 *Deconstructing Popular Music*

Music 140 *Meet the Beatles*

Music 150 *Music in Society*

Music 160 *Study of Jazz*

Music 257 *American Musical Identity*

Music 260 *Jazz Theory*

Religion 115 *Consuming Divinity: Religion and Food*

Religion 217 *The Qur'an*

Religion 225 *Rel/Anth : Global Christianity*

Religion 236 *Comparative Scriptures*
 Religion 307 *Mediating Religions*
 Religion 310 *Hearing Islam*
 Rhetoric, Writing, and Public Discourse 121
Fundamentals of Argumentation
 Rhetoric, Writing, and Public Discourse 175
Persuasion, Propaganda, and Power
 Rhetoric, Writing, and Public Discourse 225
Communication in Science
 Rhetoric, Writing, and Public Discourse 230
Introduction to Rhetoric and Public Culture
 Rhetoric, Writing, and Public Discourse 255 *The*
Rhetoric of Social Protest
 Rhetoric, Writing, and Public Discourse 260
Rhetoric and Sensation in Civic Life
 Rhetoric, Writing, and Public Discourse 325
Rhetorics of Health and Medicine
 Rhetoric, Writing, and Public Discourse 350
Political Campaign Communication
 Rhetoric, Writing, and Public Discourse 353

Rhetoric of the Black Freedom Struggle
 Rhetoric, Writing, and Public Discourse 360
Variable Topics in the Rhetoric of Social Protest
 Rhetoric, Writing, and Public Discourse 387
Rhetorical Criticism
 Sociology 248 *Sociology of Big Data*
 Sociology 337 *Seminar in Cultural Sociology*
 Theater and Dance 118 *Dance in Popular Media*
 Theater and Dance 210 *World Theatre*
 Theater and Dance 235 *Medieval and*
Renaissance England and Early Modern Europe
 Theater and Dance 250 *Hip Hop Culture*
 Theater and Dance 357 *Theory and Performance*
 Theater and Dance 372 *Theater: Modern Europe*
 Theater and Dance 373 *Theater: United States*
 Theater and Dance 377 *Ancient Theater*

Observe and Evaluate

Different forms of observational, somatic, emotional, or empirical research methods can help designers gain empathy for human needs and desires with respect to a specific design problem. These methods can vary across disciplines and by who or what is being observed or evaluated. Such methods are also used to evaluate design prototypes as hypotheses or potential solutions. Like all research with people, design studies must be conducted ethically, with respect and care for participants. For this reason, the concentration requires that students take a 2-4-credit people-focused or design research methods course. The following courses count in this area (note: some have prerequisites and/or are part of course sequences, so students should plan carefully with an advisor):

Anthropology 337 *Regional Ethnographic Fieldwork*
 Anthropology 339 *Ethnographic Research and Writing*
 Computer Science 267 *Human-Computer Interaction*
 Economics 215 *Behavioral Economics*
 Human-Centered Design 201 *Design Research Methods*
 Psychology 220 *Research Methods*
 Rhetoric, Writing and Public Discourse 340 *VT: Rhetorical Field Methods Rhetoric*
 Sociology 207 *Social Research Methods*
 Theater and Dance 218 *Embodied Art Practice; Introduction to Somatics*

Design and Make

Artifacts are designed. Human-centered design includes the act of creating, crafting, or making. For this reason, students in the concentration are required to take a 2-4-credit course in which they design and make something. The following courses count in this area:

Art all classes
 Computer Science 215/Mathematics 215 *Intro.*

Data Science
 Computer Science 267 *Human-Computer*

Interaction

Computer Science 360 *Interactive Computer Graphics*

Computer Science 370 *Software Design*

English 250 *Intermediate Creative Writing - Fiction*

English 251 *Intermediate Creative Writing - Poetry*

English 252 *Intermediate Creative Writing - Nonfiction*

English 320 *Advanced Creative Writing - Fiction*

English 321 *Advanced Creative Writing - Poetry*

English 322 *Advanced Creative Writing - Nonfiction*

French 260 *Improv(ing) in French*

Hispanic Studies 428: *Spanglish: Discourses of Language and Cultural Identity in the United States*

Music 145 *Songwriting*

Music 271 *Introduction to Music Technology*

Rhetoric, Writing, and Public Discourse 110 *Public Speaking*

Rhetoric, Writing, and Public Discourse 170 *Language and Writing*

Rhetoric, Writing, and Public Discourse 180 *Processes and Practices of Writing*

Rhetoric, Writing, and Public Discourse 210 *Writing for Diverse Purposes*

Rhetoric, Writing, and Public Discourse 301 *ST: Sensing the Self: Technology in Human Culture*

Theater and Dance 211 *Stage Electronics*

Theater and Dance 215 *Stage Management*

Theater and Dance 234 *Dance Composition*

Theater and Dance 245 *Foundations of Technical Theater*

Theater and Dance 246 *Foundations of Design*

Theater and Dance 249 *Stage Properties: Design & Construction*

Theater and Dance 269 *Performance Ensemble*

Theater and Dance 277 *Costume Construction*

Theater and Dance 330 *Playwriting*

Theater and Dance 345 *Lighting Design*

Theater and Dance 360 *Digital Media Design for Theater*

Theater and Dance 366 *Scenic Design for Theater*

Theater and Dance 367 *Scenic Painting*

Theater and Dance 378 *Costume Design for the Theater*

Collaborative Practical Experience

Students are required to complete a Collaborative Practical Experience for the concentration before taking HCD 497. This can take one of several forms, it can occur during a semester or summer, and it can be paid or unpaid. Students should plan this experience with their HCD advisor.

Possibilities:

- Internship; examples include:
 - UX or user experience design project focusing on web or smartphone applications for families with little or no access to computers or internet
 - Work with a healthcare organization to redesign their client intake process and/or space and/or infrastructure to improve privacy and health-information sharing
 - Placement in a graphic arts design firm working on messaging surrounding climate change

- Sustained community engagement (ideally project-based or leadership role); examples include:
 - A community fellow position working with the County Health Department to redesign a newsletter and other communication platforms to improve reach to underserved populations.
 - Semester-long placement with an education professional to redesign an afterschool curriculum in environmental education
 - Placement in a library archive to design a digital archive and sharing/storytelling platform for local immigration stories

- A collaborative project engaging an audience beyond the student and the faculty supervisor; examples include:
 - Student-initiated research and design proposal for a new non-profit comedy club in Walla Walla
 - Collaborative design and production of a public art work
 - Design and building of classroom furniture, in collaboration with local school programs in Skilled and Technical Sciences, to meet needs of local K-12 students with intellectual or developmental disabilities.
 - Design signage presenting historical information to the public at an historic site
 - Research on creating inclusive learning spaces at Whitman
 - Research on the design of automotive information displays for safer driving

HCD 101 Introduction to Human-Centered Design

Spring

Davis, Lincoln

4 credits

Students will learn core concepts of design thinking and a suite of design tools that can be applied across disciplinary boundaries, gaining experience through studio exercises and a substantial collaborative design project addressing a specific context of use and considering the full range of stakeholders. Students completing this course will be prepared to select Deepening Courses, seek a Collaborative Practical Experience, and begin to envision their eventual design portfolio. Students will be assessed based on reflective writing and discussion as well as their presentation of a collaborative project. Juniors and Seniors will be enrolled by consent only. Offered once per semester.

202-203 Special Topics in Human-Centered Design

1-4 credits

A course which examines special topics in human-centered design at the introductory level. Any current offerings follow.

HCD 201 Design Research Methods

Not offered 2023-24

4 credits

Students will learn how to collect and analyze qualitative and/or quantitative data from people that will inform their designs. Methods covered will be chosen from among the following: survey, interview, participatory design, experiments, and/or observation, as well as specific methods within HCD. Topics include research ethics and IRB, timing and stages of data gathering and interpretation, and strategies to figure out the best type of input to gather, and the best method to use, in order to inform a design. This course is not required, but is recommended to fulfill this Deepening area, especially for students not already taking other courses listed here in their majors or minors. Prerequisite: HCD 101.

302-303 Special Topics in Human-Centered Design

1-4 credits

A course which examines special topics in human-centered design at the introductory level. Any current offerings follow.

102-103 Special Topics in Human-Centered Design

1-4 credits

A course which examines special topics in human-centered design at the introductory level. Any current offerings follow.

402-403 Special Topics in Human-Centered Design

1-4 credits

A course which examines special topics in human-centered design at the introductory level. Any current offerings follow.

HCD 497 Human-Centered Design Capstone

Not offered 2023-24

4 credits

This seminar/studio will be co-taught by a faculty member and a visiting Designer in Residence, with guest lectures or modules offered by other faculty participating in the Human-Centered Design concentration. Students will interpret and integrate what they learned in the Deepening Courses and the Collaborative Practical Experience, consider professional issues in design, and develop a design portfolio. Students will connect their curricular and co-curricular experience, exploring empathy, ethics, collaboration, reciprocity, and organizational culture in communities and organizations where human-centered design is practiced. Students will be evaluated based on presentations and reflective writing, including the final portfolio. *Prerequisites:* HCD 101; completion of the Collaborative Practical Experience; consent of instructor. Offered once per year.