

HNRS 105-115 Syllabus

Innovation and Discovery in Engineering, Arts, and Sciences

Our syllabus strives to answer the questions: What can you expect from this course and the professors? What will you bring to it, and what will you take away?



WHAT IS HONORS?

The honors mindset is one of self-motivated passion for learning. Honors students are exploratory, experimental, curious, excited, and open to new ideas and experiences.

Honors faculty value experiential learning that breaks out of the classroom and creates space for risk-taking, exploration, thoughtful reflection, and critique.

THE BIG QUESTIONS

How can you become an agent of positive change for the big, complex problems you care about? How do you collaborate and engage with people from all different backgrounds, specialties, and skill levels to create truly innovative approaches to community-scale issues? How do you adopt the mindset of a scientist, an artist, a poet, an engineer... to bring fresh perspectives on age-old challenges? How do you reach an audience - catch their attention, speak their language, inspire their passions - to grow your influence and enact your visions?

In IDEAS, you will answer these questions and many (many) more by looking inward and reaching outward, peering through different lenses to interrogate the many intersecting systems of our local and global communities. Our interdisciplinary approach to ethics, design, and communication taps the skillsets and mindsets of a diverse faculty team to create a dynamic environment for innovation and discovery.

Read on to learn more about the story of IDEAS and find our course learning outcomes and policies.

Course Modules

The Story of IDEAS

MODULE 1: SELF IN DESIGN

Start by looking inward and backward to investigate your own values, perspectives, and biases, and how those can be communicated through design. You'll work on two projects in tandem - writing and design - to explore how we use the concrete to express the abstract, and how design is an act of communication.



MODULE 2: COMMUNITY PERSPECTIVES IN DESIGN

Now expand your view outward - how do the needs and perspectives of others complicate your interactions with the world? Embark on a team design project, pulling what you learned from Module 1 into a more nuanced context while you acquire new skills and embrace new perspectives.



MODULE 3: THE INVISIBLE ARCHIVE

In spring, extend your reach even further by investigating the intersecting influences of complex city systems. Learn to read a city like a book, peering beyond the obvious to find the invisible stories that make up this place.



MODULE 4: DESIGNING FOR CHANGE

Transfer what you learned from the Invisible Archive Project into a new context. Work with a team to design for a local community, pulling together all the skillsets and mindsets you've developed this year to become an agent for positive change.



Course Learning Outcomes

By the end of your year in IDEAS, you will be able to...



Evaluate the roles of self, place, and community in ethical design innovation using multiple research modes.

Analyze interconnected systems of communities through geographical, temporal, ethical, environmental, societal, and cultural lenses.



Integrate written, visual, and oral communication techniques for different rhetorical purposes and situations.

Develop innovative and thoughtful design solutions using principles, mindsets, and processes of engineering, sciences, design, and the arts.



Apply professional techniques of team membership and project management in order to promote individual and team wellness.

Reflect on educational and personal experiences to make meaning, discover connections, and identify opportunities for future growth.



Grading, Attendance, & Participation

Grading Approach: IDEAS fosters a culture of creativity, inquiry, practice, feedback, revision, and continual intellectual growth. We want to educate the “whole person,” emphasize skills over knowledge, encourage creativity, and embrace ambiguity. Our grading system emphasizes process over products, giving you the freedom to take risks and make mistakes - and learn from them. Your grade each semester will consist of major projects and minor assignments, with specific grading criteria provided for each one. Major projects each include a component of “completion-based” work, which encourages timely progress without emphasis on quality.

You must submit gradeable work for the final deliverables of each major project (Autobiography of Place, M1 Design, M2 Team Design; M3 Invisible Archive, M4 Team Design, Portfolio) in order to pass the class each term.

Grading Scale:

A	92.5 – 100
A-	89.5 – 92.4
B+	86.5 – 89.4
B	82.5 – 86.4
B-	79.5 – 82.4
C+	76.5 – 79.4
C	72.5 – 76.4
C-	69.5 – 72.4
D+	66.5 – 69.4
D	62.5 – 66.4
D-	59.5 – 62.4
F	0 – 59.4

You must earn a C- or better in HNRS 105 to be eligible for HNRS 115.

Attendance: IDEAS is a highly active course, with lecture-style delivery minimized to make space for exercises, group engagement, and project work during class. Active participation is critical for your success in the course and for fostering a positive, collegial class environment. Attendance is mandatory with exceptions for illness and other excused absences (review the [Mines policy](#) for details). **We require timely communication by email when you need to miss class.** Unexcused absences can negatively impact your grade by up to half a letter grade. Extreme cases (such as missing 25% or more of class sessions) can result in a larger penalty, up to failing the course.

Participation: A consistent negative outlook (without effort to communicate concerns with the professor), unwillingness to engage in activities, and/or visible disengagement (completing other coursework, watching videos, etc.) during class can negatively impact your grade by up to half a letter grade. Conversely, students who consistently show meaningful effort to improve and/or go above and beyond in helping to foster a collaborative and supportive classroom community may see a boost in their final grade if they land on the threshold between letter grades.

Important note:

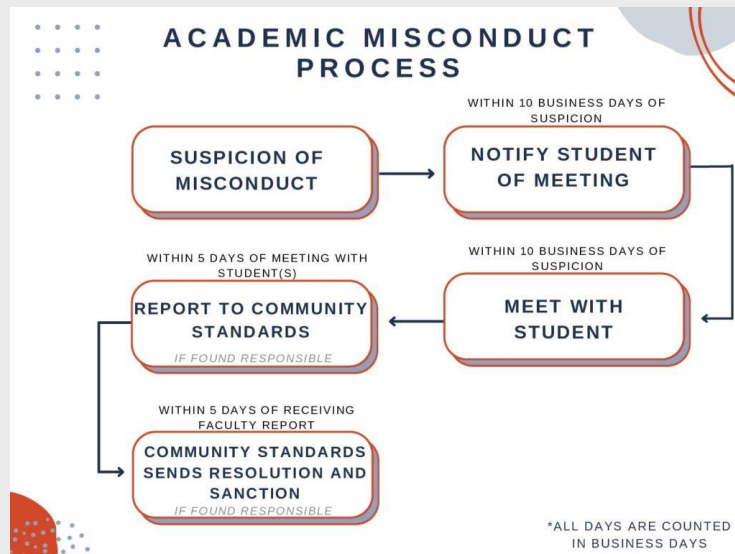
IDEAS is a two-semester course sequence. You must pass **both** fall and spring semesters of IDEAS to replace NHV and Design 1. If you are unable to pass both semesters of IDEAS, you will need to take **both** NHV and Design 1 in order to graduate. If at any point you are concerned about your ability to pass IDEAS, set up a meeting with your professor or the Thorson Director right away. We want to help you succeed!

Academic Integrity & Misconduct

Academic Misconduct: We take academic integrity seriously in honors. Plagiarizing others' ideas or work, misrepresenting previously graded work as new/original work for this class, and misleading professors or peers are common examples of misconduct. We encourage you to read the full [Mines Honor Code and Academic Integrity/Misconduct policy](#) and come to us if there is anything you'd like to discuss.

Generative Artificial Intelligence (GenAI): In accordance with Mines policy, you may use genAI tools to help generate ideas and brainstorm and/or to support thoughtful revision of your own work. However, you should note that the material generated by these tools may be inaccurate, incomplete, biased, or otherwise problematic. We encourage you to consider how genAI complements, supplants, or fails to replace your contributions and abilities – and your capacity for true innovation.

You may **not** submit final work for evaluation that was generated, in whole or in part, by genAI tools in this course. By submitting work for evaluation in this course, you represent it as your own intellectual product. If you include content that was inspired or supported by Generative Artificial Intelligence tools (including, but not limited to, ChatGPT and other large language models) in work submitted for evaluation in this course, you must clearly [document and credit your source](#). Failure to properly cite sources, including AI tools for generating content, would be considered Academic Misconduct in violation of [Mines Academic Integrity/Misconduct Policy](#). You are **strongly encouraged** to include a descriptive note with your submission - or within your reflections, when applicable - to explain your use of genAI to your professor, and/or to meet with your professor during your work process to ask questions and receive guidance on your planned use of genAI.



The above image illustrates the timeline for addressing potential instances of academic misconduct. Find the image and review the full policy [here](#).

Course Policies

Accommodations and Accessibility

Students with Disabilities: Mines is committed to ensuring equal access for all students, including students with disabilities. If you anticipate or experience any barriers to learning in this course, please feel welcome to discuss your concerns with the instructors. Students with disabilities may also wish to contact Disability Support Services (DSS) to discuss options to removing barriers in this course, including how to register and request official accommodations. If you are already registered with DSS, please confirm that your primary (Monday) professor has received your accommodation letter, and reach out to them at your earliest convenience to discuss your needs in this course.

Please reference your accommodations whenever they are relevant or necessary, for example, when requesting an extension on a deadline. If you feel that your accommodations are not being honored by the professors or the course design, reach out to Director Lauren Shumaker (shumaker@mines.edu) or DSS to start a conversation.

Accessibility within Canvas: Read the Accessibility Statement from Canvas to see how the learning management system at the Colorado School of Mines is committed to providing a system that is usable by everyone. The Canvas platform was built using the most modern HTML and CSS technologies, and is committed to W3C's Web Accessibility Initiative and Section 508 guidelines.

Course Culture

All learning opportunities at Mines, including this course, require a safe environment for everyone to be productive and able to share and learn without fear of discrimination or harassment. **We strongly value respect, diversity, and compassion, and urge you to talk to us if any type of discrimination or harassment occurs.** If you are uncomfortable talking to the IDEAS professors, please consider contacting Prof. Toni Lefton (tlefton@mines.edu), Executive Director of the University Honors and Scholars Programs, or pursuing other options as noted below.

Mines Policy: Discrimination, Harassment, and Sexual Misconduct of any type, including sexual harassment, sexual assault, dating violence, domestic violence, and stalking, are prohibited under the Policy Prohibiting Unlawful Discrimination and the Policy Prohibiting Sexual Harassment, Sexual Assault, and Interpersonal Violence. As a participant in this course, we expect you to respect your instructors and your classmates. As your instructors, it is our responsibility to foster a learning environment that supports diversity of thoughts, perspectives and experiences, and honors your identities. We are also mandatory reporters, and if we receive a disclosure of Discrimination, Harassment, and/or Sexual Misconduct, we are required to report it to the Title IX Coordinator.

Reporting Options: If something is said or done in this course (by anyone, including myself) that made you or others feel uncomfortable, or if your performance in the course is being impacted by your experiences outside of the course, please report it to any of the IDEAS professors (if you are comfortable doing so), to Toni Lefton (Executive Director of UHSP), to the <https://www.mines.edu/institutional-equity-title-ix/reporting/>, and/or to <https://www.mines.edu/institutional-equity-title-ix/submit-report/> (an anonymous option). You can also contact the Mines Title IX Coordinator, Carole Goddard, directly at 303.273.3260 or titleix@mines.edu for more information.

It's on us, all of the Mines community, to engineer a culture of respect.

Mines Resources

If you feel overwhelmed, anxious, depressed, distressed, mentally or physically unhealthy, or concerned about your wellbeing overall, there are resources both on- and off-campus available to you. If you need assistance, please ask for help from a trusted faculty or staff member, fellow student, or any of the resources below. As a community of care, we can help one another get through difficult times. If you need help, reach out. If you are concerned for another student, offer assistance and/or ask for help on their behalf. Students seeking resources for themselves or others should visit care.mines.edu.

Additional suggestions for referrals for support, depending on comfort level and needs include:

- Student Outreach & Support (SOS): mines.edu/sos for various resources and options, or to submit an online “SOS Referral” about someone you’re concerned about, or email sos@mines.edu
- CASA: <https://www.mines.edu/casa/> for academic advising, tutoring, academic support, and academic workshops
- Counseling Center: <https://www.mines.edu/counseling-center/> or students may call 303-273-3377 to make an appointment. There are also online resources for students on the website. Located in the Wellness Center 2nd floor. Located at 1770 Elm St.
- Health Center: <https://www.mines.edu/student-health/> or students may call 303-273-3381 for appointment. Located in Wellness Center 1st floor.
- Colorado Crisis Services: For crisis support 24 hrs/7 days, either by phone, text, or in person, Colorado Crisis Services is a great confidential resource, available to anyone. <http://coloradocrisiservices.org>, 1-844-493-8255, or text “TALK” to 38255. Walk-in location addresses are posted on the website.
- Food and/or Housing: Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact Student Outreach and Support (mines.edu/sos). Furthermore, please notify your professor if you are comfortable in doing so. This will enable your professor to provide resources that may be available.

ALL OF THESE OPTIONS ARE AVAILABLE FREE FOR STUDENTS. The Counseling Center, Health Center, and Colorado Crisis Services are confidential resources. The Counseling Center will also make referrals to off-campus counselors, if preferred.

In an emergency, you should call 911, and they will dispatch a Mines or Golden PD officer to assist.