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	Department/School
Edson College of Nursing and Health Innovation (CNU)	Edson College of Nursing and Health Innovation (CNU)

Submission Type

New Request

Requested Effective Date

Fall 2025

ASU Request

Is this request for a permanent course or a topic?

Permanent Course

Subject Code	Course Number	Units/Credit Hours
HCI	201	3

Course Information
Enter the course catalog information, found in the web course catalog or Kuali CM.

Course Title

Innovations for Sustainable Health Care

Course Catalog Description

Explore the dynamic intersection of health technology innovations and sustainability within the healthcare sector. Students will look at the environmental impact our healthcare system has had in the past, and the present, and develop ways to improve for the future. Students will delve into the evolving landscape of health tech, examining how cutting-edge technologies can be harnessed to drive sustainability, efficiency, and positive environmental impact in healthcare practices. The course will cover a range of topics, from the damage nuclear medicine could cause to the development of eco-friendly medical devices, to the implementation of digital solutions that enhance healthcare delivery while minimizing ecological footprints.

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

Credit is allowed for only HCI 201 or HCI 294 (Innovations for Sustainable Healthcare)

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

Sustainability (SUST)

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

HCI201_Innovations for Sustainable Health Care.docx

Sustainability (SUST)
The Sustainability requirement will provide students with an interdisciplinary understanding of socio-ecological systems in relation to global challenges and opportunities. The learning objectives emphasize systems thinking, where human and non-human systems are understood as intimately connected, with human actions affecting all life on a planet with limits and boundaries. Students should also become familiar with how cultural, political, economic, social, and ethical beliefs, practices and systems are related to and impact planetary systems. Students will use course concepts and systems and futures thinking to address contemporary questions or challenges.

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.**

SUST Learning Outcome 1: Demonstrate an understanding of the earth and its ecosphere, including the measures that indicate their capacities and limits.

Health Care Impact Analysis:
1. Investigate and analyze how health care production and waste exert pressure on the ecosphere, such as deforestation, pollution, climate change, and resource depletion.
2. Discuss the consequences of these activities on biodiversity, ecosystem services, and overall ecosphere health.
3. Identify specific indicators or metrics used to measure the impact of human activities on the ecosphere.

Discussion Board #2 (10% of final grade)

SUST Learning Outcome 2: Trace historical impacts of a range of socio-economic, political or cultural choices on integrated human-environmental wellbeing.

How Far Have We Come? Waste vs. Time
Create a PowerPoint presentation that shows the effect of medical waste over time, and its effect on the environment. Students should look at the entire supply chain of the chemicals and products being used in healthcare from manufacturing to packaging, to transportation, to the use, and disposal of the medication. This should include the consideration of damage caused by nuclear waste with the rise of nuclear medicine. Assignment should also look at the environmental effects locally, nationally, and globally.

Discussion Board #3 (10% of final grade)

SUST Learning Outcome 3: Envision pathways toward futures characterized by integrated human-environmental wellbeing.

"Innovations Today for a Greener Tomorrow" – using what you have learned from class, propose an innovative way to make the practice of Health care better for the planet. We could look into topics such as renewable energy, recyclable waste, biodegradable PPE, Minimizing the use of radioactive chemicals, etc.
Minimum 15 slides

Presentation (20% of final grade), [rubric](#)

SUST Learning Outcome 4: Articulate an approach to addressing contemporary questions or challenges that employs concepts or practices of sustainability.

Discussion Board #4 (10% of final grade)
Making an Impact

Research two ways in which your local community is working toward innovative healthcare solutions to address climate change and share what your findings are.

Assess your own personal choices that affect your health and the environment. What things can you do, as an individual, to support more sustainable health/healthcare? (Using the EWG website - consumer guide; How do your choices rate? What have you taken away?)

Paper (10% of final grade)
How can we produce less waste in healthcare?
Discuss potential ways to support sustainability and create more "green" and eco-friendly innovations in each of the areas of health and healthcare: pharmaceutical industry, technological devices, personal devices, and healthcare systems. Make sure to touch on why these innovations would produce less and how they could be assessed.

List all course-specific learning outcomes. Where appropriate, identify the associated SUST 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 SUST learning outcome.

Explain the Interconnection of Health Innovation and Sustainability:
Students will grasp the relationship between historical health technology innovations and sustainability, recognizing the potential of innovations to address environmental, social, and economic aspects of healthcare. (SUST LO2)

Evaluate Sustainable Design Principles in Health Tech:
Students will develop the ability to evaluate sustainable design principles in healthcare, considering eco-friendly materials, energy efficiency, life cycle analysis, and environmental impact. (SUST LO1)

Create Innovative Solutions for Sustainable Healthcare:
Students will engage in problem-solving activities and project work to propose and develop new, innovative, health technology solutions that contribute to sustainability in healthcare delivery, infrastructure, and resource waste management. (SUST LO3)

Apply Data Analytics in Healthcare Sustainability:
Students will apply data analytics techniques to assess and optimize healthcare processes for sustainability, utilizing data-driven insights to enhance efficiency and reduce environmental impact. (SUST LO4)

Provost Use Only

Backmapped Maroon Approval

No Response

Form Submission - Proposer

Submitted for Approval | Proposer

Nancy Kiernan - December 6, 2024 at 12:16 PM (America/Phoenix)

Department Approval

Approved

Judith Karshmer

Katherine Kenny

Daniel Eckstrom

Nancy Kiernan - December 6, 2024 at 1:22 PM (America/Phoenix)

Katherine Kenny, associate dean, approved via email

GSC Coordinator Review

Approved

TJ Robedeau - December 9, 2024 at 9:20 AM (America/Phoenix)

April Randall

Assistant Vice Provost Review

Sent Back

Tamiko Azuma - December 9, 2024 at 12:11 PM (America/Phoenix)

For each of the provided assessments, please include their % of the total course grade.
For the presentation, please include the grading rubric or a description of how the presentation will be evaluated. This information will help the General Studies Council determine if the assessment appropriately measures the learning outcome.

If you have any questions, please email me: azuma@asu.edu

Form Submission - Proposer

Submitted for Approval | Proposer

Nancy Kiernan - December 9, 2024 at 3:42 PM (America/Phoenix)

Department Approval

Approved

Judith Karshmer

Katherine Kenny

Daniel Eckstrom

Nancy Kiernan - December 9, 2024 at 3:43 PM (America/Phoenix)

> Added % of grade information to each assignment. Hyperlinked to the presentation rubric.

GSC Coordinator Review

Approved

TJ Robedeau - December 11, 2024 at 8:53 AM (America/Phoenix)

April Randall

Assistant Vice Provost Review

Approved

Tamiko Azuma - December 17, 2024 at 4:03 PM (America/Phoenix)

> All required components confirmed.

Pre-GSC Meeting

Approved

TJ Robedeau - January 9, 2025 at 10:09 AM (America/Phoenix)

April Randall

Sustainability (SUST) Committee

Acknowledgement Requested

Kevin Dooley

Jose Lobo - January 28, 2025 at 8:45 PM (America/Phoenix)

> revise and resubmit --- how SUST LO1, LO2, and LO4 are addressed needs to be improved and more details provided.

Evan Berry

Treavor Boyer

General Studies Council Meeting

Waiting for Approval

TJ Robedeau

April Randall

Registrar Notification

Notification

Courses Implementation

Implementation

Approval

Rebecca Flores

Lauren Bates

Alisha Von Kampen

Proposer Notification

Notification

Nancy Kiernan

College Notification

Notification

Daniel Eckstrom

Nancy Kiernan

Katherine Kenny

ATCS Notification - ASU Course

Notification

Bryan Tinlin

Jessica Burns

Michele Devine

DARS Notification

Notification

Leticia Mayer

Peggy Boivin

EdPlus Notification

Notification

Sarah Shipp

Bronson Cudgel