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 reviewed by 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				
Spring 2025				
ASU Request				
Is this request for a permanent course or a topic?				
Topic				
Subject Code	Course Number	Units/Credit Hours		
HCI	294	3		

### **Topic Information**

If your request is approved:

- 1. Topics on <u>omnibus courses</u> only carry designations for three consecutive semesters (excluding summer), *whether or not they are scheduled.* Once expired, a new request must be submitted.
- 2. Topics on **permanent courses** require mandatory review every five years.

Topic Title	List all other courses where this topic exists and
Town south and four Countries the Library	the sections will be combined in the schedule.
Innovations for Sustainable Healthcare	

## **Topic Description**

This course is designed to explore the dynamic intersection of health technology innovations and sustainability within the healthcare sector. 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 development of eco-friendly medical devices to the implementation of digital solutions that enhance healthcare delivery while minimizing ecological footprints.

### 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.

### HCI 294 Syllabus - gold.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.

<u>Instructions:</u> 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.

## Healthcare Impact Analysis:

- 1. Investigate and analyze how healthcare 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.

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

#### Waste vs. Time - what have we done?

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.

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

o "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

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

When disasters and pandemics change your focus

Using examples from the story "Five Days at Memorial" and more recent examples of how the pandemic placed stresses on our health system, participate in Discussion 2 - What would you do? In times of crisis, does the safety of our planet take a backstage to the safety of the population of the planet?

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:**

0.a. 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:**

0.a. 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:**

0.a. 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:

0.a. 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)

# Form Submission - Proposer

Submitted for Approval | Proposer

Michael Collins - April 8, 2024 at 7:07 PM (America/Phoenix)

# Department Approval

Approved

**Judith Karshmer** 

Katherine Kenny - April 9, 2024 at 4:47 AM (America/Phoenix)

**Daniel Eckstrom** 

Nancy Kiernan

### **GSC Coordinator Review**

Sent Back

Kaitlyn Dorson - April 9, 2024 at 10:20 AM (America/Phoenix)

When I look up this topic in Kuali CM, "Innovations for Sustainable Healthcare" is not listed as one of the topics offered by this course and there is no new proposal in Kuali CM under review to add this topic to this course. Please review and revise this proposal with the correct topic title or submit a proposal in Kuali CM to add this topic to this course.

**April Randall** 

# Form Submission - Proposer

Submitted for Approval | Proposer

Michael Collins - April 10, 2024 at 1:06 PM (America/Phoenix)

# Department Approval

**Approved** 

**Judith Karshmer** 

Katherine Kenny - April 10, 2024 at 1:49 PM (America/Phoenix)

The request for Topic was submitted today.

**Daniel Eckstrom** 

Nancy Kiernan

# **GSC Coordinator Review**

Sent Back

Kaitlyn Dorson - April 10, 2024 at 1:59 PM (America/Phoenix)

The appropriate GS Gold statement is required to be included in the syllabus that is attached in this proposal. Please edit the syllabus to include the appropriate GS Gold statement which can be found linked in the GS Gold Designation Request field in the following phrase: "The syllabus must include all requirements of ACD 304-10 and the appropriate General Studies Gold statement found here. Syllabi with missing components will not be accepted."

**April Randall** 

# Form Submission - Proposer

Submitted for Approval | Proposer

Michael Collins - April 10, 2024 at 2:29 PM (America/Phoenix)

# **Department Approval**

Approved

Judith Karshmer

Katherine Kenny - April 11, 2024 at 5:19 AM (America/Phoenix)

**Daniel Eckstrom** 

Nancy Kiernan

#### **GSC Coordinator Review**

Approved

Kaitlyn Dorson - April 11, 2024 at 9:23 AM (America/Phoenix)

**April Randall** 

# Assistant Vice Provost Review

Sent Back

Tamiko Azuma - April 11, 2024 at 9:26 AM (America/Phoenix)

For the course-specific learning outcomes, please identify the SUST LO's for each outcome.

For example: Students will be able to describe how political decisions differentially impacted natural resource systems in rural vs. urban communities. [SUST LO2]

# Form Submission - Proposer

Submitted for Approval | Proposer

Michael Collins - April 11, 2024 at 10:12 AM (America/Phoenix)

# Department Approval

Approved

**Judith Karshmer** 

Katherine Kenny

**Daniel Eckstrom** 

Nancy Kiernan - April 11, 2024 at 10:55 AM (America/Phoenix)

### **GSC Coordinator Review**

**Approved** 

Kaitlyn Dorson - April 11, 2024 at 12:07 PM (America/Phoenix)

**April Randall** 

### Assistant Vice Provost Review

Sent Back

Tamiko Azuma - April 11, 2024 at 1:09 PM (America/Phoenix)

In the last section, please identify the associated SUST learning outcome for each course-specific learning outcome. For example: Students will be able to describe how political decisions differentially impacted natural resource systems in rural vs. urban communities. [SUST LO2]

Please email me if you have any questions: tamiko.azuma@asu.edu

# Form Submission - Proposer

Submitted for Approval | Proposer

Michael Collins - April 11, 2024 at 2:03 PM (America/Phoenix)

# **Department Approval**

**Approved** 

**Judith Karshmer** 

Katherine Kenny
Daniel Eckstrom
Nancy Kiernan - April 11, 2024 at 3:42 PM (America/Phoenix)

### **GSC Coordinator Review**

**Approved** 

Kaitlyn Dorson - April 11, 2024 at 3:44 PM (America/Phoenix)

**April Randall** 

#### **Assistant Vice Provost Review**

**Approved** 

Tamiko Azuma - April 11, 2024 at 3:45 PM (America/Phoenix)

## **Pre-GSC Meeting**

Approved

Kaitlyn Dorson - April 11, 2024 at 3:48 PM (America/Phoenix)

**April Randall** 

# Sustainability (SUST) Committee

Acknowledgement Requested

Jose Lobo - April 23, 2024 at 10:35 AM (America/Phoenix)

The Sustainability Sub-Committee recommends revise and resubmit. The Sub-Committee acknowledges and applauds the novelty and usefulness of bringing sustainability considerations to health care innovation. But the syllabus reads as if sustainability concerns were simply added to an existing syllabus without much integration. The assignments need to be better described and matched with the specifics of the SUST learning outcomes: how will the assignments advance the learning outcomes?

**Evan Berry** 

Jada Ach

**Treavor Boyer** 

# **General Studies Council Meeting**

Waiting for Approval

Kaitlyn Dorson

April Randall
Registrar Notification Notification
Courses Implementation
Implementation Approval
Rebecca Klein  Lauren Bates  Alisha Von Kampen
Proposer Notification  Notification  Michael Collins
College Notification Notification
Daniel Eckstrom  Nancy Kiernan  Katherine Kenny
DARS Notification Notification
Leticia Mayer Peggy Boivin