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.

College/School		Department/School	
College of Integrative Sciences and Arts (CLS)		School of Applied Sciences and Arts (CASA)	
Submission Type			
New Request			
Requested Effective Date	2		
Spring 2025			
ASU Request			
Is this request for a perm	nanent course or a topic	:?	
Торіс			
Subject Code	Course Numb	er Units/Credit Hours	
ABS	494	3	
ensure you have reque request must be submi	ourses carry a designati sted the term you plan t tted.	on for one semester (including summer). Please to offer/schedule the topic. Once expired, a new atory review every five years.	
2. Topics on permanent			

This course will cover issues related to human-wildlife interactions and understanding the connection between human and natural systems. We will cover both environmental and social factors important to animal biodiversity and human well-being. Using urban-suburban environments as a model system, we will re-conceive what conservation and sustainability mean in a human-dominated world. Topics covered include: survey methods used to quantify biodiversity in

cities, summarize environmental data, how to use community-source data, and how to communicate project results to a wide audience from public to specific stakeholders.

Has this topic been scheduled in the past with a GS Gold designation? If so, list which semester(s).	Omnibus topics cannot hold a GS Gold designation for more than three semesters total.	Student Work Examples No Response
No	<ul> <li>If this topic has already been offered twice with a GS Gold designation, you must attach examples of student work in the next field confirming the measurement of all category learning outcomes. The proposal will not be reviewed without these files.</li> <li>If this topic has been offered three times with a GS Gold designation, you must request a new permanent course, then request the General Studies designation under the permanent course number.</li> </ul>	

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.

ABS 494 Annotated Syllabi-FINAL.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.

<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.

Lectures and discussions cover issues related to ecosystem services and ecosystem disservices in cities. See uploaded materials on Leading Discussion.

Students lead discussions of papers that summarize the effect of environmental conditions found in urban areas on wildlife. The rubric outlines that students should explain to the class how the research papers defined and measured urbanization. Students synthesize the effects on biotic communities and how those communities are measured. See paper topics on: Bird communities and SES (social-ecological systems), and Colonization and extinction rates of prairie dogs across an urban gradient. At the end of each discussion day, we move around the class and each student summarizes the key points of the paper and ideas of classmates.

Lead Discussion 60 pts Rubric

1. Students are assigned ecological papers that demonstrate key patterns of wildlife ecology in an urban environment, from this, students prepare 8-10 slides to synthesize the key points of the paper, explain how the authors define or quantify urbanization, and explain how the paper has contributed to the development of wildlife ecology in urban systems (30 pts)

2. Students include recent literature that illustrate emerging approaches related to the topic in urban wildlife ecology (20 pts)

3. Students prepare 3-5 questions for class to discuss around papers and core principles learned in class (10 pts)

Google Drive of Supporting Documentation - https://drive.google.com/drive/folders/1-\_ScrV9b3NhdTGDvkYeMbkHGMd8ISZxN?usp=drive\_link

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

About a third of the course grade comes from an assignment on a complex issue - the Crosstown Assessment. See uploaded document: Cross-town Assessment.

Because it is important for students to integrate new information within existing knowledge to apply concepts to novel environments and situations, the Cross-town Assessment allows students to explore biodiversity patterns from 7 neighborhoods in the greater Phoenix metro area across a socio-economic gradient. Students gather data to share with the class by uploading data to a shared Google Drive. Depending on students' interests and career aspirations, data are gathered on economics, biodiversity, safety and wellbeing, and other urban metrics. Because biodiversity is inequitably disturbed in cities, students can test specific hypotheses and patterns related to income and bird diversity or impervious surface and tree canopy. Students synthesize data and present findings in one of several formats: short video or reels, podcast with interview and guest.

Google Drive of Supporting Documentation - https://drive.google.com/drive/folders/1-\_ScrV9b3NhdTGDvkYeMbkHGMd8ISZxN?usp=drive\_link

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

Several guest speakers and discussion papers include how biodiversity in the built environment leads to greater human wellbeing. Quizzes and exam questions include students describing how urban biodiversity contributes to ecosystem services that benefit human urban residents. Students read a paper called the Pigeon Paradox and others that explore how interactions with nature provide wellbeing by reducing stress, anxiety, and depression in humans. See also the outcome related to #4 on integrating One Health topics in human-nature interactions. Guest speakers include researchers who study bird diversity and how feeding yard birds increases wellbeing in residents. Guest speakers address how particular traits of wildlife have more position attitudes by people and this can influence the conservation outcomes for wildlife.

Examples of quiz questions:

Quiz: In class, Dr. Kelli Larson, social scientist, discussed how biodiversity in the built environment leads to greater human wellbeing. What were some of the takeaways from her research on residential yard management, gardening, and wellbeing.

Quiz: In class, explain the 'paradox' described in the Pigeon Paradox. Explain how common species might benefit human wellbeing and influence tolerance of wildlife that could lead to co-existence.

Google Drive of Supporting Documentation - https://drive.google.com/drive/folders/1-\_ScrV9b3NhdTGDvkYeMbkHGMd8ISZxN?usp=drive\_link

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

Lectures, quiz, and examinations cover issues related to One Health. See uploaded materials.

Students will learn how ecosystems, environmental conditions, and human health are connected in cities in the One Health framework. Students are expected to summarize peer-reviewed articles as examples of these connections. Lectures include Concept Questions to help guide students' focus on content, quizzes, and exams. Students are expected to provide two examples of how human health, wildlife health, and environmental conditions are interrelated.

Final Exam (15 pts): In class, we discussed how ecosystems, environmental conditions, and human health are connected in cities in the One Health framework. Find two examples from primary literature that give example(s) of this interconnectedness. Discuss the specific ways in which each of the three elements is important to maintaining One Heath. In other words – how does ecosystems service/disserves interact with environmental conditions and human health, etc.

Rubric/Scoring: 3 pts for identifying two journal articles, 6 pts for each of the connections explained in paper one (ecosystem-environment, ecosystem-health, environment-health) and 6 pts for connections examined in paper two.

Google Drive of Supporting Documentation - https://drive.google.com/drive/folders/1-\_ScrV9b3NhdTGDvkYeMbkHGMd8ISZxN?usp=drive\_link

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.

## After completion of this course , students will be able to:

• Recognize, define, and articulate core ecological principles underlying wildlife ecology in urban-suburban environments as gathered from classic papers to emerging new approaches. [SUST LO1 & LO2]

• Identify the historical role of humans in shaping urban wildlife communities. [SUST LO1 & LO4];

• Use urban-suburban environments as a model system for re-conceiving what conservation means in a human-dominated world. [SUST LO3 & LO4];

• Envision pathways toward futures characterized by integrated human-environmental wellbeing. [SUST LO2 & LO3]

• Apply a variety of approaches to conduct research in urban environments and communicate science to a broad audience. [SUST LO1]

Provost Use Only

Backmapped Maroon Approval

No Response

# Form Submission - Proposer

Submitted for Approval | Proposer

Leah Capps - November 5, 2024 at 8:54 AM (America/Phoenix)

### **Department Approval**

Approved

Kielii Lilavois

Cynthia Rose - November 5, 2024 at 9:13 AM (America/Phoenix)

Manuel Aviles-Santiago

Trisha Eardley

#### **GSC Coordinator Review**

Approved

TJ Robedeau - November 5, 2024 at 9:36 AM (America/Phoenix)

April Randall

#### Assistant Vice Provost Review

Approved

Tamiko Azuma - November 5, 2024 at 1:36 PM (America/Phoenix)

All required components confirmed.

#### Pre-GSC Meeting

#### Approved

TJ Robedeau - November 5, 2024 at 2:16 PM (America/Phoenix)

April Randall

## Sustainability (SUST) Committee

#### Acknowledgement Requested

**Kevin Dooley** 

Jose Lobo - December 4, 2024 at 8:26 AM (America/Phoenix)

The SUST subcommittee recommends: revise and resubmit. The syllabus needs to more clearly connect the course's content with the SUST category and the LOs assessments need to be described in more detail.

in more detail.
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
Leah Capps
College Notification
Notification
Trisha Eardley
DARS Notification
Notification
Leticia Mayer
Peggy Boivin

EdPlus Notification	
Notification	
Sarah Shipp	
Bronson Cudgel	