SCHOOL OF STEM SYLLABUS

TERM:

INSTRUCTOR:

COURSE CODE: ENV-201

OFFICE HOURS:

COURSE TITLE: Urban Environment

OFFICE LOCATION:

DAY(S) AND TIME(S):

EMAIL:

LOCATION:

PHONE:

COURSE COREQUISITE: Take ENG-101 previously or concurrently.

CREDITS: 3

COURSE DESCRIPTION:
This course explores the social, cultural and technological forces that shape our contemporary cities. Students will understand the policies and preferences that gave rise to urban, suburban and exurban ecologies, and the ways in which these places might be made more sustainable. Using examples from around the world, the course exposes students to exemplars of place-based sustainability—from the level of the dwelling, through the neighborhood, and on to the metropolitan agglomeration. The course exposes students to urban ecology as a way of re-integrating nature into our cities, exploring concepts such as urban heat island mitigation and green infrastructure—rain gardens, green roofs, permeable pavements and Low Impact Development —as well as urban agriculture, community gardens, urban parks, and Brownfield remediation

STUDENT LEARNING OUTCOMES:

TEXTBOOK AND SUPPLEMENTAL MATERIALS:
Urban Ecology: An Introduction by Ian Douglas & Philip James ISBN-13: 978-0415538954 ISBN-10: 0415538955

GRADING POLICY:

Attendance 10%
Participation 15%
Final Paper Outline 5%
Quizzes 15%
Discussions 25%
Final paper 30%

SAMPLE COURSE SCHEDULE:
Week Topics:

1st • Introduction to the course
• The context of urban ecology
• Cities and ecology
2nd • The context of urban ecology
• Cityscapes: places for nature
• Cities as systems
3rd • The physical environmental factors affecting life in towns and cities
• The urban atmosphere: weather, climate and air quality
• Urban geomorphology and urban soils: knowing the ground you build on and which you cultivate
4th • The physical environmental factors affecting life in towns and cities
• Urban hydrology
• Urban biogeochemistry
5th • Urban habitats, plants and animals: species diversity in urban environments
• Urban habitats
6th • Urban habitats, plants and animals: species diversity in urban environments
• Urban flora
• Urban fauna
7th Midterm Exam
In class discussion of research papers
8th • Values and uses of urban ecosystem services
• Urban ecosystem services and the assessment of their values
9th • Values and uses of urban ecosystem services
• Contact with nature: human health and well-being
10th • Values and uses of urban ecosystem services
• Restoration ecology and creative conservation: local and regional collaboration
Submission of research paper outline
11th • Caring for the urban environment: progress towards sustainable, liveable cities: responsibilities and planning
• Urban ecology stewardship
12th • Caring for the urban environment: progress towards sustainable, liveable cities: responsibilities and planning
• Adapting to change
13th • Caring for the urban environment: progress towards sustainable, liveable cities: responsibilities and planning
• The role of urban ecology in future cities
14th Presentation of Research Papers and Review for Final Exam
15th Final Exam

HCCC POLICIES, STATEMENTS, AND SERVICES:

https://www.hccc.edu/administration/academic-affairs/syllabus-addendum.html