

TULANE UNIVERSITY  
 Department of Ecology and Evolutionary Biology  
 EBIO 4661: URBAN AGROECOLOGY AND SUSTAINABILITY IN NEW ORLEANS  
 SPRING 2021



**Professor: Dr. D. Jelagat Cheruiyot (she/her/hers)**

**E-mail:** [dcheruiyot@tulane.edu](mailto:dcheruiyot@tulane.edu)

**Day/Time/Location:**

**Lecture:** M 12:55 PM-4:40 PM

**Location:** MA 200A

**Projects sites:**

- 1) Broadmoor Food Forest, 3730 Toledano St, New Orleans, LA 70125 (Broadmoor)
- 2) Mardi Gras Indians Garden 2614 Lasalle Street, New Orleans, LA 70113 (Central City)
- 3) New Zion Baptist Church 2500 Lasalle Street, New Orleans, LA 70113 (Central City)

**Office:** 422 Boggs. Office hours will be held Via Zoom – ID - 891 850 2146

**Phone:** 504 862-8280 (ext. 28280 on campus)

**Office hours:** Zoom - T & Th 3:30 PM - 4:30 PM or by appointment

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**Teaching Assistant:**

**Name:** Monica Brady, (She/her/hers), PhD Student -The Farrer Lab.

<https://emilyfarrer.wordpress.com>

**Email:** [mbrady@tulane.edu](mailto:mbrady@tulane.edu)

**Office/office hours:** By appt

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## PERSONAL STATEMENT

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**I care** deeply about your learning and wellbeing. **Please** communicate with me about any concerns or challenges that might hinder your learning- physically, mentally, emotionally.

**Being present** in my class is a confirmation that you are ok (maybe not perfect).

**Be on time** and participate in discussions and/or class activities.

**Take charge** by completing all your assignments on time and communicate if there is a reason you cannot. **I am accessible to you** via Zoom during office hours, and you are welcome to make an appointment that will fit your schedule, even if you do not have questions to ask about the subject matter. I am happy to meet in-person outside while maintaining a safe social distance.

## COURSE DESCRIPTION

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*Urban Agroecology and Sustainability in New Orleans* is a project centered 3-credit undergraduate course. The is a course designed for students from all disciplines with a general interest in urban agriculture, ecology and sustainable food production systems. This course will provide a socio-ecological approach to the study of urban food production, by evaluating the pressures driving biodiversity, energy cycling conservation, job creation, human health and well-being. The core of this course will be on vegetable and fruit production in urban landscape with the four principles of agroecology in practice. This course will be very interactive and hands-on where students will put theory into practice and service.

## COURSE OBJECTIVES

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*Urban Agroecology and Sustainability in New Orleans* course, we will use urban gardening to get hands on experience in food production while addressing a range of food security and ecological issues in New Orleans. Throughout the semester, we will discuss in detail the principles of

agroecology as well as topics such as current community food production practices in New Orleans, local access to healthy and culturally appropriate food, the relationship between living conditions and food production, food cultivation, soil health and biodiversity, and impacts of urban agriculture on species interactions. In practice, students will adopt and maintain a community garden, interact with the community, grow produce, apply problem solving skills, teamwork, and critical thinking.

## LEARNING OUTCOMES

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In addition to the content of the field, this course emphasizes the acquisition of living and working skills such as:

- Verbal persuasion and communication.
- Quantitative and computational skills.
- Collaboration with other students.
- Integration and analysis of factual material and complex arguments to address novel situations in classroom discussions and knowledge demonstrations (exams).
- Social, leadership, empathy, and prioritization skills.
- A sense of personal responsibility and connection to local and global communities.

## READINGS AND MATERIALS

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- Weekly readings will be available on Canvas under each module

## ASSESSMENTS

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### 1. Project

The class will be randomly divided into three or four teams, each team will adopt one of the garden sites (we will add a fourth garden if the class enrollment stays at 20+). You will decide the plants that you plant in your community garden, plant, maintain and harvest the produce at the end of the semester if they are ready for harvest. For this part of the assessment, you will be assessed based on the progress in the garden and how well you have incorporated the principles of agroecology in your garden design, building and planting. The principles of agroecology are –

- Environmental/ecosystem principle.
- Social and cultural principle.
- Political principle.
- Economic principle.

### 2. Weekly Reflections

These are notes from your journal that you keep individually. You are required to have an entry at the end of each class on Monday. You should write your journal entry at the end of class when your thoughts are still fresh. This will include what you did that day, what where some of the exciting accomplishments, conversations from class or garden? What are some of the challenges and frustrations in the practice? What are the goals for the next meeting? What are the questions you would like to bring up to either your team, class, community or professor? (this is not a space to complain about your peers, instructor or other).

### 3. Team Reports

There will be two team reports -

- i. A midterm report – **Due March 8<sup>th</sup>**
- ii. A final report – **Due May 8<sup>th</sup> (day of our class final)**

Your midterm reports should be a reflection of where you are on your project as a team, the accomplishments, the projects in hand, the challenges and recommendation forward. You will need to meet and discuss with your team as you write this report together.

### 4. Team Presentations

You will have two team presentations –

- i. Midterm presentation – **Due March 5<sup>th</sup> – In class discussion on March 8<sup>th</sup>**
- ii. Final presentation – **Due April 30<sup>th</sup> – In class discussion on May 3<sup>rd</sup>**

The midterm presentation is a space where you share your progress, the exciting ways in which your team is working together and incorporating the principles of agroecology into your design and planting. It is also a great opportunity to ask receive feedback from the class at large. The final presentation will be – well final with lots of exciting produce, I hope. You will record both presentations as a team on Zoom and share it in the canvas discussion platform by the due dates. This will give us all a chance to watch the presentations and give feedback on canvas as well as in class.

#### Important dates

Assignments	Due Dates
Weekly individual reflections/journals	Every Monday at 11 PM
Midterm team presentation	March 5 <sup>th</sup>
Midterm team report	March 8 <sup>th</sup>
Final team presentation	April 30 <sup>th</sup>
Final team report	May 8 <sup>th</sup> – day of finals

#### GRADE DISTRIBUTION BREAKDOWN

Assessment	Points	Percent score
Project	100	30%
Reports - Midterm and final	100	20%
Presentations - midterm and final	100	20%
Weekly reflections @20	300	30%
Total	600	100%

#### Grading Scale (%)

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
>93	93-90	89-87	86-83	82-80	79-77	76-73	72-70	69-67	66-63	62-60	<60

## UNIVERSITY POLICIES

### COVID -19

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Faculty and students must comply with University policies on COVID-19 testing and isolation, which are located here <https://tulane.edu/covid-19/health-strategies>. Faculty and students must wear face coverings in all common areas, including classrooms, and follow social distancing rules. Failure to comply is a violation of the Code of Student Conduct and students will be subject to University discipline, which can include suspension or permanent dismissal. If a student cannot attend class for any reason, the student is responsible for communicating with their instructors to make up any work they may miss. Faculty will provide online options for class participation, outlined in this document, and unless a student is seriously ill, they are expected to use this option. The University Health Center will provide documentation verifying a student is ill, as well as verification that a student may return to class. With the approval of the Newcomb -Tulane College dean, an instructor may have a student who has excessive absences involuntarily withdrawn from a course with a WF grade after written warning at any time during the semester.

### ADA/Accessibility Statement

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Tulane University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability, please let me know immediately so that we can privately discuss options. I will never ask for medical documentation from you to support potential accommodation needs. Instead, to establish reasonable accommodations, I may request that you register with the Goldman Center for Student Accessibility. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. Goldman Center contact information: [goldman@tulane.edu](mailto:goldman@tulane.edu) (504) 862-8433; <https://accessibility.tulane.edu>

### Code of Academic Conduct

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The Code of Academic Conduct applies to all students, full-time and part-time, in Tulane University. Tulane University expects and requires behavior compatible with its high standards of scholarship. By accepting admission to the university, a student accepts its regulations (i.e., Code of Academic Conduct and Code of Student Conduct) and acknowledges the right of the university to take disciplinary action, including suspension or expulsion, for conduct judged unsatisfactory or disruptive. Unless I indicate differently on instructions, all assignments and exams are to be completed individually and without any study aid, including textbooks, class notes, or online sites. If you have any question about whether a resource is acceptable, you must ask the instructor rather than assume

### Religious Accommodation Policy

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Per Tulane's religious accommodation policy, I will make every reasonable effort to ensure that students are able to observe religious holidays without jeopardizing their ability to fulfill their academic obligations. Excused absences do not relieve the student from the responsibility for any course work required during the period of absence. Students should notify me within the

first two weeks of the semester about their intent to observe any holidays that fall on a class day or on the day of the final exam

## UNIVERSITY RESOURCES

### Title IX

Tulane University recognizes the inherent dignity of all individuals and promotes respect for all people. As such, Tulane is committed to providing an environment free of all forms of discrimination including sexual and gender-based discrimination, harassment, and violence like sexual assault, intimate partner violence, and stalking. If you (or someone you know) has experienced or is experiencing these types of behaviors, know that you are not alone. Resources and support are available: you can learn more at [allin.tulane.edu](http://allin.tulane.edu). Any and all of your communications on these matters will be treated as either “Confidential” or “Private” as explained in the chart below. Please know that if you choose to confide in me I am mandated by the university to report to the Title IX Coordinator, as Tulane and I want to be sure you are connected with all the support the university can offer. You do not need to respond to outreach from the university if you do not want. You can also make a report yourself, including an anonymous report, through the form at [tulane.edu/concerns](http://tulane.edu/concerns).

Student support information	
Confidential	Private
<i>Except in extreme circumstances, involving imminent danger to one's self or others, nothing will be shared without your explicit permission.</i>	<i>Conversations are kept as confidential as possible, but information is shared with key staff members so the University can offer resources and accommodations and take action if necessary for safety reasons.</i>
Counseling & Psychological Services (CAPS)   (504) 314-2277 or The Line (24/7)   (504) 264-6074	Case Management & Victim Support Services   (504) 314-2160 or <a href="mailto:srss@tulane.edu">srss@tulane.edu</a>
Student Health Center   (504) 865-5255	Tulane University Police (TUPD)   Uptown - (504) 865-5911. Downtown – (504) 988-5531
Sexual Aggression Peer Hotline and Education (SAPHE)   (504) 654-9543	Title IX Coordinator   (504) 314-2160 or <a href="mailto:msmith76@tulane.edu">msmith76@tulane.edu</a>

## Emergency Preparedness & Response:

EMERGENCY NOTIFICATION SYSTEM: TU ALERT	RAVE GUARDIAN
<p>In the event of a campus emergency, Tulane University will notify students, faculty, and staff by email, text, and phone call. You were automatically enrolled in this system when you enrolled at the university.</p> <p>Check your contact information annually in Gibson Online to confirm its accuracy.</p>	<ul style="list-style-type: none"> <li>Download the RAVE Guardian app from the App Store</li> <li>Communicate with dispatchers silently by selecting "Submit Tip" feature in the app</li> <li>Use the Safety Timer feature to alert your "guardian" (TUPD, family, friend) when travelling alone at night</li> </ul> <p>For more information, visit <a href="https://publicsafety.tulane.edu/rave-guardian">publicsafety.tulane.edu/rave-guardian</a></p>
ACTIVE SHOOTER / VIOLENT ATTACKER	SEVERE WEATHER
<div data-bbox="727 407 906 575" data-label="Image"> </div> <ul style="list-style-type: none"> <li><b>RUN</b> – run away from or avoid the affected area, if possible</li> <li><b>HIDE</b> – go into the nearest room that can be locked, turn out the lights, silence cell phones, and remain hidden until all-clear message is given through TU ALERT</li> <li><b>FIGHT</b> – do not attempt this option, except as a last resort</li> </ul> <p>For more information on Active Shooter emergency procedures or to schedule a training, visit <a href="https://emergencyprep.tulane.edu">emergencyprep.tulane.edu</a></p>	<ul style="list-style-type: none"> <li>Follow all TU Alerts and outdoor warning sirens</li> <li>Seek shelter indoors until the severe weather threat has passed and an all-clear message is given</li> <li>Do not attempt to travel outside if weather is severe</li> <li>Monitor the Tulane Emergency website (<a href="https://tulane.edu/emergency/">tulane.edu/emergency/</a>) for university-wide closures during a severe weather event</li> </ul>

Table 5: TENTATIVE SCHEDULE: Subject to modification based on our interests and progress

Week	Day	Topics	Where does it happen?
1	Jan 25	Introduction and overview and tour of the gardens	Split class - In class and on-site.
2	Feb 1	Plants and the abiotic environment (light, water, temperature, wind, inorganic soil) Designing and research.	Lecture, discussion and garden designing.
3	Feb 8	Plants and the biotic environment – plant/pollinator, plant/herbivore and plant/pathogen interactions.	In class discussion – critiques on the designs.
4	Feb 15	Enhancing recycling of biomass - Soil health and composting.	Work in the compost garden.
5	Feb 22	Community interactions for sustainability and food security.	In the garden and community
6	Mar 1	Species interactions – plant/plant interactions. Scientific questions, hypothesis and experimental design	Working in the garden and collecting data.
7	Mar 8	<b>Mid-semester presentations and discussions.</b>	Review the work progress – reevaluate and reset.
8	Mar 15	Creating circular food systems: Agroecology for food sovereignty – food nourishing our bodies, soil as a living organism -life sustaining.	Discussion/case studies.
9	Mar 22	Optimizing functional biodiversity and biological interactions	Planting in your gardens.
10	Mar 29	Biological control and Integrated pest management. Conserving species and genetic resource diversity – at local and landscape scales.	Work in the garden/collect data.
11	Apr 5	Resource and energy cycling - decrease the loss of energy, water, nutrients, and genetic resources through resource conservation.	In -class discussion.
12	Apr 12	Agroecosystems – diversity, succession, disturbance and stability.	Work in the garden.
13	Apr 19	Models in agroecology and their sustainability.	In class discussions and case studies.
14	Apr 26	Harvesting and last meeting with community.	In your garden.
15	May 3 <sup>rd</sup>	Final presentation and discussions.	Tour of the gardens.
<b>Finals</b>	<b>Saturday May 8<sup>th</sup> 12-3 PM. The final report/journal entry due by 3 PM</b>		