BIOLOGY 498 H02 Special Topics: Food for a Hot Planet - Honors Spring 2022, MON and WED 1:00pm - 2:20pm, FMH 310

Instructor: Dr. Maria Stanko Office: CKB 340E Phone: 973-642-7246

Email: mstanko@njit.edu
Office Hours: Tues 1:30-4:30 or by appointment.

Course website: http://canvas.njit.edu/

Course Description: Human food systems have profound effects on our planet's ecosystems. The climate changes that result from those ecosystem effects will shape the food systems of the future. This course will focus on the intersections between climate change and food and involve extensive reading and discussions on these topics. Informed by those discussions, students will work throughout the course to predict how climate change will influence the way we eat, contribute to the design, planting, and maintenance of the campus food forest proposed by previous students, and develop a plan to communicate their vision for the future of food to the campus community.

Instructional Delivery Mode: This course is offered in the face-to-face instructional delivery mode and inperson attendance is expected. Please note that for the first two weeks of class, all instruction will be synchronous remote via WebEx. NJIT plans for in-person attendance to begin on Jan. 31.

Required Texts:

Little, Amanda. 2019. The Fate of Food: What We'll Eat in a Bigger, Hotter, Smarter World. Harmony Books. ISBN paperback: 9780804189040; hardcover: 9780804189033.

Additional Readings/Media: Throughout the semester, I'll provide additional readings and videos to supplement the course text and to serve as the basis for class discussions. All additional readings will be posted to the course Canvas site.

Learning Objectives: Students will:

- Identify the important natural and human components of food systems.
- Apply biological concepts to explain the impacts of human food systems on the planet's ecosystems and climate.
- Investigate the implications of climate change projections for human food systems.
- Formulate and evaluate predictions for the future of food, considering the context of climate change, human population growth, and socioeconomic factors.
- Read critically and be able to form and articulate opinions on complex issues.
- Collaborate with colleagues to conceive of and execute an inquiry-based final project.

Course Policies:

- All course materials (including recordings of lectures) are provided for your own use only. No posting/sharing anywhere.
- You must check Canvas regularly and ensure that you regularly check the email address associated with your Canvas profile.
- Late assignments are accepted but penalized 10% per day late, with a maximum 50% deduction.
- Students joining the class remotely are expected to join the class with video.

BIOLOGY 498 H02 Special Topics: Food for a Hot Planet - Honors Spring 2022, MON and WED 1:00pm - 2:20pm, FMH 310

Grade Scale: Grades will be assigned based on the percentage (rounded to a whole number) of points you earn out of the total possible, following the standard grade scale (90%+ A, 85-89% B+, 80-84% B, etc.).

15%
30%
25%
30%
100%

Assessment of Learning:

Canvas.

Participation – This course involves extensive discussion of course topics

and readings. Participation includes evidence of preparation and effort and will be assessed via verbal discussion, relevant participation in chat during class, and contribution to discussion worksheets. **Assignments** – Periodic assignments related to further exploration of a course topic will be submitted via

Reading reports – Students will submit periodic written summaries of selected required readings on Canvas.

Project – As a class, we will work together throughout the semester to design and implement a collaborative project related to the food forest. Each student's contribution will be assessed independently. Tasks may vary depending on the nature of the project chosen, but will involve literature reviews, writing, and oral presentation.

Academic Dishonesty: Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf. Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu.

COVID-19 Safety Requirements: All persons physically present in any department facility or classroom shall comply fully with the NJIT COVID-19 safety policy at all times. Masks must be worn before entry to all department facilities, and social distancing guidelines must be followed. Individuals who are unable to wear a face mask due to medical reasons should contact the Office of Disability Services or Human Resources. Students who enter a classroom without wearing a mask properly, or remove their mask, will be cautioned by the instructor. The same is true for students who disregard the seating order or guidelines for social distancing. Students with obvious symptoms of respiratory illness should not come to campus and will be asked to leave. Students who do not comply with a request by a department instructor to adjust their behavior, in accordance with the University Policy, will be subject to disciplinary actions. Instructors have the right to expel the student or terminate the class session at which any student fails to comply with the University Policy.

Disability Statement: Please let me know if you need accommodations for a disability. If you are in need of accommodations due to a disability please contact Chantonette Lyles, Associate Director of the Office of Accessibility Resources & Services (OARS), to discuss your specific needs: https://www.njit.edu/studentsuccess/accessibility

BIOLOGY 498 H02 Special Topics: Food for a Hot Planet - Honors Spring 2022, MON and WED 1:00pm - 2:20pm, FMH 310

Course schedule: Please note that this is the proposed schedule, but I am likely to revise it as needed as the semester progresses; you will be notified of any changes. Additional readings and details of assignments will be posted to the course website.

Week	Date	Topic
1	19-Jan	Course Introduction / Food Systems
2	24-Jan	Impact of Food Systems on Climate Change
	26-Jan	Movie: "Kiss the Ground"
3	31-Jan	Impact of Climate Change on Food Systems
	2-Feb	Movie: "Soylent Green"
4	7-Feb	History of the Future of Food
	9-Feb	Movie: "The Man Who Tried to Feed the World"
5	14-Feb	Green Revolution
	16-Feb	Movie: "Plant this Movie"
6	21-Feb	Project work day
	23-Feb	FF: Introduction
7	28-Feb	FF: Chapter 1: A Taste of things to Come
	2-Mar	FF: Chapter 2: Killing Fields
8	7-Mar	FF: Chapter 3: Seeds of Drought
	9-Mar	Sustainable Food Initiatives
	14-16-Mar	NO CLASS - Spring Break
9	21-Mar	FF: Chapter 4: Robo Crop
	23-Mar	Forest planting day – optional extended until 4pm
10	28-Mar	FF: Chapter 5: Sensor Sensibility
	30-Mar	FF: Chapter 6: Altitude Adjustment
11	4-Apr	FF: Chapter 7: Tipping the Scales
	6-Apr	FF: Chapter 8: Meat Hooked
12		FF: Chapter 9: Stop the Rot and Chapter 10: Pipe
	11-Apr	Dreams
	13-Apr	Project work day
13	18-Apr	FF: Chapter 11: Desperate Measures
	20-Apr	FF: Chapter 12: Antiquity Now
14		FF: Chapter 13: What Rough Feast &
	25-Apr	Epilogue: Growing Up
	27-Apr	Project work day
15	2-May	Semester wrap