

SEE-U Agroecology and Food Systems

- Summer 2017 -

WEEK 1 - FOUNDATION

Wednesday, July 5: Introduction - Ecosystems, Sustainability, and Agriculture (1)

9 AM—12 PM: Student and instructor introductions. Introduction to the course structure, schedule, and assignments. Lecture.

12 PM—1 PM: Lunch break

1 PM—2:30 PM: Introduction to labs, quizzes, blogs, presentations, and scientific writing. Discussion of the first labs and lab write ups.

2:30 PM—4 PM: Visit CU Secondary School Garden and introduction to soil sampling

Assignments due today:

Come ready to share a bit about your background and why you were interested in this course.

Thursday, July 6: Food Systems and Introduction to Ecological Principles (2) and Black Rock Forest site visit

8:30 AM: Depart for Black Rock Forest (*meet at 118th St. and Amsterdam*)

10 AM—11 AM: Soil sampling and Berlese funnel set up (Lab 1)

11 AM—12:30 PM: Lecture

12:30 PM—1 PM: Lunch break

1 PM—4 PM: Vegetation measurements (Lab 2)

4 PM: Depart for NYC

Assignments due today:

Review Lab 1 and 2 assignments and diversity indices

Share YouTube videos about Berlese funnels

Friday, July 7: Diversity Indices and Black Rock Forest site visit

8:30 AM: Depart for Black Rock Forest

10 AM—12 PM: Dismantle Berlese funnels, discussion and distinction various types of soil arthropods (Lab 1)

12 PM—1 PM: Lunch

1 PM—3 PM: Examine soil arthropods using microscope

Assignments due today:

Review soil arthropod identification sheets

WEEK 2 - AGROECOLOGICAL PROCESSES (ENVIRONMENTAL SCIENCE)

Monday, July 10: Abiotic Processes, Climate and Biogeochemistry (3)

10 AM—12 PM: *Lecture from Professor Naeem*
12 PM—1 PM: Lunch
1 PM—2 PM: Guest lecture from GrowNYC's Chris Wayne
2 PM—2:20 PM: Break
2:30 PM—4 PM: Labs 1 and 2 discussion and analysis

Assignments due today:

Quiz 1 (take home)
3 Ideas for your Final Project Proposal

Tuesday, July 11: Biotic Factors and Soils (4)

10 AM—12 PM: *Lecture from Professor Naeem*
12 PM—1 PM: Lunch
1 PM—2 PM: Guest lecture from DSNY Representative
2 PM—4 PM: Lab 3 and 4 pre-lab: discussion compost and mapping

Wednesday, July 12: Farm Systems, Certifications, LCAs (5) and BIG Reuse site visit

10 AM—12 PM: Lecture and Quiz 2
12 PM—1 PM: Lunch
1 PM: Transit to BIG Reuse
2 PM—3:30 PM: BIG Reuse site visit and Lab 3

Assignments due today:

Lab 1 (Diversity indices)

Thursday, July 13: Duke Farms site visit

8:30 AM: Depart for Duke Farms
10 AM: Arrive Duke Farms, introduction to site, discussion of orienteering. Collect lunches.
11 AM: Depart for day in the field and Lab 4
3 PM: Return to center for departure

Assignments due today:

Blog 1
Lab 2 (Vegetation measurements)

Friday, July 14: Final Project Discussions

9 AM—1:40 PM: Individual discussion of final projects draft proposals
1:40 PM—4 PM: Soil analysis using Soil Doc Kit

Assignments due today:

Final project ideas —come ready to discuss with questions and talking points

WEEK 3 - AGROECOLOGICAL SYSTEMS (ECOLOGY)

Monday, July 17: Ecology and Animals in Agricultural Systems (6)

10 AM—12 PM: Lecture

12—1 PM: Lunch break

1 PM: Depart for Feedback Farms, Harlem (Subway)

2—3:30 PM: Site visit, Feedback Farms, Harlem—Lab 5, Part I

3:30 PM: Depart for Columbia

Assignments due today:

Draft project proposal

Tuesday, July 18: Guest Lecture - The Green Revolution and Its Impacts on Agriculture (Sara Tjossem) (7)

10 AM—12 PM: Lecture

12 PM—1 PM: Lunch break

1 PM—1:30 PM: Quiz 3

1:30 PM—4 PM: Lab discussion and analysis and intro to nutrient lab.

Wednesday, July 19: Landscape Ecology and Ecosystem Services in Agricultural Systems (8)

10 AM—12 PM: Lecture

12 PM—12:30 PM: Lunch break

12:30 PM: Transit to East NY Farms (subway)

1:30 PM—3:30 PM: East NY Farms and Lab 5, Part II

3:30 PM: Depart for Columbia

Assignments due today:

Lab 3 (Compost)

Review nutrient Lab 6, any questions

Thursday, July 20: Glynwood Farm Incubator site visit

8:30 AM: Depart campus for Glynwood incubator farms

10 AM: Arrive Glynwood. Lecture, tour and nutrient lab (Lab 6, farm inputs and outputs)

4 PM: Depart Glynwood/New Paltz for NYC

6 PM: Arrive NYC

Assignments due today:

Lab 4 (Mapping)

Friday, July 21: Sustainable Agriculture - Case Study in Coffee (9)

10 AM—12 PM: Lecture and Quiz 4

12:30 PM—4 PM: 15 minute individual final project meetings. Sign up!

Assignments due today:

Blog 2

WEEK 4 - AGROECOLOGY AND SUSTAINABILITY (SUSTAINABILITY)

Monday, July 24: Indicators and Measurements of Sustainability and Challenges to Sustainability (10)

10 AM—12 PM: Lecture and Quiz 5
12 PM—1 PM: Lunch break
1 PM—4 PM: Lab and field practical discussion

Assignments due today:

Lab 5 (Urban agroecosystems)

Tuesday, July 25: Overnight at Black Rock Forest and Field Practical

8:30 AM: Depart for Black Rock Forest
10 AM: Arrive and drop gear
10:30 AM—12 PM: Field practical
12 PM—1 PM: Lunch break
1 PM—5 PM: Field practical

Assignments due today:

Prepare for Field Practical

Wednesday, July 26: Site visits to Rise and Roots Farms and Blooming Hill Farms

8 AM—9 AM: Breakfast and pack lunch
9:30 AM: Depart for Rise and Root Farms
10 AM—11:30 AM: Rise and Root tour and discussion
11:30 AM—1 PM: Blooming Hill tour and discussion
1 PM—3 PM: Data collection (lab 8 - soil lab)
3 PM: Depart for campus

Thursday, July 27: Guest Lecture - Biodiversity in Agroecosystems (Matt Palmer) (11)

10 AM—12 PM: Guest Lecture from Matt Palmer
12 PM—1 PM: Lunch break
1 PM—4 PM: Lab 6 discussion and analysis

Friday, July 28: Black Rock Forest and Final Project Meetings

8:30 AM: Depart campus
10 AM—4 PM: Lab time at BRF and Final Project meetings

Assignments due today:

Individual Project outline
Blog 3
Quiz 6

WEEK 5 - FOOD SOURCING, FIELD VISITS, DATA COLLECTION

Monday, July 31: Hawthorne Valley Farms *overnight Won Dharma Buddhist Retreat Center*

12 PM—1 PM: Lunch at Hawthorne Valley Farm Store

1 PM—6 PM: Farm tour and insect biodiversity exercise/lesson with Farmscape Ecology's Conrad Vispo and Claudia Knab-Vispo

6 PM: Dinner

8 PM—10 PM: Insect biodiversity night sampling exercise

Assignments due today:

Lab 6 (Nutrient budgets)

Tuesday, August 1: Visit to McEnroe Farms

8 AM: Breakfast and clean up

9:30 AM: Depart Won Dharma

10 AM—11:30 AM: Waterfall hike

11:30 AM: Depart for McEnroe Farms

12:15 PM: Lunch McEnroe Farms Farm Store

1 PM—3 PM: Tour and discussion compost facility

3 PM: Depart for Campus (~2 hour drive)

Assignments due today:

Review McEnroe Farm Website: <http://www.mcenroeorganicfarm.com/about/history>

Wednesday, August 2: Food and Environmental Sustainability (12)

10 AM—12 PM: Lecture

12 PM—1 PM: Lunch break

1 PM—4 PM: Discussion and analysis of labs/prep for lab tomorrow

Thursday, August 3: Stone Barns Center site visit

8:30 AM: Depart campus

9:30 AM: Arrive Stone Barns Center

Day long exercise, including lunch!

3:30 PM: Depart for campus

Assignments due today:

Lab 7 (Pollination)

Quiz 7 (take home)

Friday, August 4: Black Rock Forest site visit

8:30 AM: Depart for BRF

10 AM—4 PM: Final soil sampling analysis for all labs (lab 8)

4 PM: Depart for campus

Assignments due today: Individual project draft

WEEK 6 - FINAL PROJECT

Monday, August 7: Black Rock Forest site visit for independent projects

8:30 AM: Depart for Black Rock Forest
Time to work on final projects
4 PM: Depart BRF

Tuesday, August 8: Biodiversity and the Future (13)

10 AM—12 PM: Lecture
12 PM Onward: Instructors available for check-ins on final project

Assignments due today:

Lab 8 (Soils)

Wednesday, August 9: Final Project day

Instructors available as necessary

Thursday, August 10: Final Presentations

9 AM—12 PM: Final Presentations
12 PM—1 PM: Lunch Break
1 PM—4 PM: Final Presentations

Assignments due today:

Final presentation and paper

Friday, August 11: Site Visit and Final Lunch

10:30 AM: Depart
12 PM—2 PM: Lunch and discussion of class
Optional Farm Work Afternoon

Return to campus by 5 PM