

## Principles and Practices of Small-Scale Organic Farming | Agriculture and Food Systems Program

11:020:321 | Summer 2016 | 3 credits

Instructor: Arianna Lindberg

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Class time + locations: Monday + Thursday 3-5:50pm at Rutgers Gardens

**Course Learning Objectives**

Through experience-based learning in the field, students will:

1. Gain an understanding of small-scale organic food production
2. Improve their ability to work collaboratively with peers and community members

Through lectures, readings and discussions, students will:

1. Increase their agricultural literacy with particular attention to sustainability and local food systems
2. Demonstrate an ability discuss the principles and practices of small-scale organic farming

**Program Learning Goals**

1. Apply a systems approach to analyzing and interpreting contemporary food and agricultural issues, opportunities, threats, and trends
2. Demonstrate effective oral and written communication skills as well as the ability to work in teams.

**Course Description**

The Student Farm at Rutgers Gardens is focused on organic production and community involvement. As an outdoor classroom, the Farm provides place-based and hands-on learning. In a broader context, the Farm provides the foundation for a wide spectrum of community outreach and programs, research opportunities and entrepreneurial pursuits. Students enrolled in The Principles and Practice of Small-Scale Organic Farming will gain experience with all aspects of basic organic vegetable, fruit and herb production, from field preparation to harvest. Through weekly readings and responses, lectures – with guest lecturers from other operating farms, University programs and Cooperative Extension, farm visits and field work, students will examine the history and philosophy of organic agriculture, as well as build a core understanding of local food systems. Topics of nutrition and food justice will have a key role, and the course will provide students with the opportunity to engage community members through outreach and education with local non-profit partners.

**Session Overview\***

Week 1	6/1 – Tour of Student Farm, Course Introduction, History + Philosophy of Organic Agriculture Assignment: Reading + Response 1
Week 2	6/5 – Planning, Field Preparation, Seeding + Seedling Production 6/8 – Organic Standards + Certification – Guest Lecture: Erich Bremer, Supervisor of Organic Certification Program, NJ Department of Agriculture Assignment: Reading + Response 2
Week 3	6/12 – Soil Fertility + Compost – Guest Lecture: Dr. Joseph Heckman, Department of Plant Biology + Pathology/Extension Specialist in Soil Fertility

	6/15 – Farm Field Trip – Sandbrook Meadow Farm** Assignment: Reading + Response 3
Week 4	6/19 – Ed Vaeth (beekeeping demonstration) Pollinators + Beneficial Insects 6/22 – Farm Field Trip – Newark Urban Farm** Assignment: Reading + Response 4
Week 5	6/26 – Disease + Insect Pests – Guest Field Visit + Lecture: Kristian Holmstrom, NJAES IPM Program Associate 6/29 – Irrigation + Rainwater Harvesting – Guest Lecture: Dr. Raul Cabrera, NJAES Specialist Assignment: Reading + Response 5
Week 6	7/3 – Crop Rotation + Cover Crops 7/6 – Community Project: Local Farm/Food Project Assignment: Reading + Response 6
Week 7	7/10 – Farmer Panel Discussion 7/13 – NO CLASS – Optional field trip Assignment: Reading + Response 7
Week 8	7/17 – Extending Seasons + Four-Season Growing 7/20 – Student Presentations, Final Exam

\*Typically, class sessions will begin with field work (3-4:20pm), followed by a lecture period (4:30-5:50pm). Some exceptions will occur based upon guest speaker availability.

\*\*Farm Field Trips will use the full duration of the class period. These sessions will not include field work at the Student Farm site. Students will be responsible for transportation to the site.

Note: The above schedule is subject to change. Sufficient notice will be provided regarding any alterations.

### ***Expectations of Student Participation***

Students are expected to participate fully in the course by being prepared for each class and field session. This course is grounded in experiential learning, and individual student's academic development depends on the exposure to and assimilation of information related to the course topic, as well as the application of this information through hands-on involvement and interaction.

If any personal circumstances should inhibit one's ability to fulfill the requirements of this course, the student should immediately contact the instructor. In addition, any student with a special need, circumstance, or disability, should make an appointment to see the instructor during the first week of class.

### ***Attendance***

A minimum level of participation is defined as being in attendance for the entire duration of a class session, and it is the student's responsibility to be in attendance for all lecture and field sessions. More than one unexcused absence will result in a step reduction of the student's semester grade (e.g. a semester grade of a B would be reduced to a C+). Each additional absence will result in another step reduction.

### ***Field Work***

A significant portion of class time will be spent in the field. Students are expected to participate fully in all activities, and are expected to dress appropriately for doing outdoor physical work related to farm

activities. Closed-toe shoes must be worn at all times during work in the field, high tunnel and greenhouse. Other weather- and work-appropriate clothing and gear is recommended (e.g. long pants, raincoat, hat, sunscreen, work gloves, water bottle).

#### *Field Trips*

Several field trips will be scheduled during the summer session. Advance notice will be provided and participation is required.

#### *Readings + Responses*

There is no required text; however, students will be responsible for accessing readings posted to Sakai. Responses to weekly readings should be posted to Forums prior to Monday meetings.

#### *Due Dates*

Except for circumstances truly beyond the student's control, all assignments are due by the dates and times specified throughout the semester. Any work submitted late will be penalized a letter grade for each day past due.

#### **Grading/Evaluation**

The final grade will be based upon the following percentages:

Participation	35%
Reading Responses	30%
Research Presentation/Report	25%
Final Exam	10%

#### *Departmental Grading Guidelines*

While the assignment of grades is ultimately the purview of the instructor, the following grading guidelines will be used for course assessment:

**A** – Outstanding – This not only means fulfilling the requirements, but impressing and going beyond the initial expectations and assigned elements of the project. The student has demonstrated a superior grasp of the subject matter coupled with a high degree of creative or logical expression, individual initiative, and a strong ability to present these ideas in an organized and analytical manner.

**B** – Very Good – The student has demonstrated a solid grasp of the material with an ability to organize and examine the material in an organized, critical, and constructive manner. The projects and in-class performance reveal a solid understanding of the techniques, issues and related theories, with some additional work completed.

**C** – Acceptable – The student has shown a moderate ability to grasp concepts and theories for the class, producing work that, while basically adequate, is not in any way exceptional. The performance in class displays a basic familiarity with the relevant literature and techniques.

**D** – Unacceptable – The work demonstrates a minimal understanding of the fundamental nature of the material or the assignment with a performance that does not adequately examine the course material critically or constructively.

**F** – Failure – The student has demonstrated a lack of understanding or familiarity with course concepts and materials. Their performance has been inadequate. Failure is often the result of limited effort and poor attendance which may indicate that the student is not in the proper field of study.

*Academic Integrity*

The University's policy on Academic Integrity is available at <http://academicintegrity.rutger.edu/academic-integrity-policy>. The principles of academic integrity require that a student:

- Properly acknowledge and cite all use of the ideas, results, or words of others
- Properly acknowledge all contributors to a given piece of work
- Make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration
- Obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions
- Treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress
- Uphold the canons of the ethical or professional code of the profession for which he or she is preparing

Adherence to these principles is necessary in order to ensure that:

- Everyone is given proper credit for his or her ideas, words, results and other scholarly accomplishments
- All student work is fairly evaluated and no student has an inappropriate advantage over other
- The academic and ethical development of all students is fostered
- The reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

*Accommodations for Students with Disabilities**Disability Services*

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation:

<https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

*Student Wellness Services*

Just In Case Web App: <http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Share A Concern: <http://studentconduct.rutgers.edu/do-something-to-help-share-a-concern/why-share-a-concern/>

There are times when people may observe a behavior and feel concerned. These concerns may be part of a larger story for a student facing challenges. Thus, it is important to **Do Something** and share your concerns so that the student can get assistance as soon as possible before the issues grow too large. If the concern is immediate, call 9-1-1.

#### Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901 / [www.rhscaps.rutgers.edu/](http://www.rhscaps.rutgers.edu/)

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

#### Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / [www.vpva.rutgers.edu/](http://www.vpva.rutgers.edu/)

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

#### Scarlet Listeners

(732) 247-5555 / <http://www.scarletlisteners.com/>

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.

*Note: All information in this syllabus and course schedule is subject to change. Any changes to the syllabus or schedule will be announced in the scheduled lecture periods. It is the student's responsibility to stay informed.*