

Sowing Seeds for the Future

Practicum in Sustainable Agriculture at UBC Farm

August 2010



“Sowing Seeds for the Future” UBC Farm Practicum 2011

Overview

What is it?

A hands-on, season-long practicum in sustainable agriculture.

Who is involved?

Participants can come from all backgrounds and are expected to be passionate about pursuing a career in sustainable agriculture.

Our **Field Mentor** will guide students through hands-on learning activities on our working farm.

Our **Education Mentor** will coordinate supplementary educational activities, lectures and farm visits.

UBC farm staff will work alongside the students and Field Mentor, to keep all activities within the context of a working farm setting.

The **UBC Farm**, through the Faculty of Land and Food Systems, will host the practicum.

Where is it?

Most instruction will take place at the UBC Farm, the last working farm within the City of Vancouver. Visits to local farms will be included as part of the practicum.

When will it happen ?

In 2011 the Sowing Seeds Practicum will run for eight months, from March 12th – November 5th Hours vary throughout the growing season:

- In March and April, the practicum will run one day per week (Saturdays 9-5)
- From May – August, the practicum hours will increase to 21 scheduled hours per week. (Wed 9-12, Thurs 9-12, Fri 9-5, Sat 8-5)
- From September to November, scheduled hours will be on Saturdays (8-5) with 7 flexible hours on either Thursdays (9-5) or Fridays (9-5)
- Students should anticipate spending, on average, an additional 5 hours per week completing readings, record-keeping, class projects and tending to their personal garden plots.

How much are the fees ?

- The fees in 2011 are \$3,000. A discount is available for UBC students who complete a directed Studies.

Sowing Seeds for the Future General Information

1. The UBC Farm and Centre for Sustainable Food Systems

The Centre for Sustainable Food Systems (CSFS) is home to the UBC Farm, a 24-hectare teaching, research and community farm located on UBC's Vancouver campus. Forming a rich mosaic of cultivated fields, teaching gardens, forest stands, hedgerows, and orchard plantings, the farm is a unique urban agrarian gem. In close proximity and fully integrated with a world-class community of researchers, the CSFS affords an opportunity to better understand and manage the characteristics of the ecosystems that support urbanizing societies. The interface with the city enhances research opportunities that also address community, ecosystem and global health.

2. The Practicum

Sowing Seeds is a practicum for experiential learning in sustainable agriculture, established in 2008. While the UBC Farm has provided practical and theoretical education to thousands of students and volunteers since 2000, Sowing Seeds is the first formal program we have offered that extends for a complete growing season.

Our eight-month practicum offers instruction and work experience in small-scale sustainable farming. To facilitate hands-on learning, participants work alongside staff in the greenhouse, gardens, fields, and orchards, and are exposed to the different aspects of sustainable production on both the garden scale and a tractor-cultivated field scale. Students attend supplementary lectures, farm visits and participate in a variety of active educational activities.

Sowing Seeds is designed as a beginning point for aspiring growers, educators, and agricultural professionals. **Students interested in starting their own operations are strongly encouraged to pursue further training with a mentor after completing the Sowing Seeds program.** Through the program, students will be introduced and connected to a network of established organic producers in BC. UBC Farm staff will assist students interested in pursuing work on established farms.

A certificate of completion will be issued to students who complete the program requirements. Please note, **this is a non-credit practicum** and therefore participants are unfortunately not eligible for student loans. UBC students who participate in the program, however, have many opportunities to apply their on-farm experience towards directed studies credits. Supervising faculty members will work in cooperation with farm staff to ensure that a student's on-farm efforts are appropriately recognized when considering directed studies credit. Please note that in 2011 we are offering a **fee discount for UBC students who register, and**

successfully earn credits, for a directed studies based on their Sowing Seeds Practicum. (See section 7 for details).

Please note, we are a small program still in development. **We currently cannot accept international applicants.** In the future we hope to become more accessible to an international audience.

3. Facilities

The program takes place at the UBC Farm, at the southern end of the University of British Columbia's Vancouver campus. The Farm is located on the traditional territory of the Musqueam people. Surrounded by coastal hemlock forest, the UBC Farm stewards a 24-ha landscape, forming a rich mosaic of cultivated field areas, hedgerows, orchard, and maturing successional forest stands. The diversity of the landscape provides valuable habitat for a range of birds, mammals, amphibians, and reptiles not found elsewhere in the city.

The gently sloping southern aspect of the site and moderate maritime climate allow for cultivation of a wide variety of crops year-round. The soils are well-drained and sandy, and are therefore workable most of the year.

Up to 250 different varieties of annual and perennial crops are cultivated at the farm in a given year. Vegetables, apples, berries, herbs, edible and cut flowers, transplants, and eggs are all produced. Annual crops and grazing livestock are managed in a multi-year crop rotation. All practices voluntarily adhere to the Canada Organic Standard for organic production. Certification of the UBC Farm is in progress.

The site is managed as an integrated, working farm system. Produce sales are the largest single source of income from the farm used to support staff wages and the academic programs on site. Food grown on site is provided to the UBC community through a Saturday farmer's market on the farm, weekly campus sales, a Community Supported Agriculture (CSA) box program, and direct sales to restaurants and campus food services. This self-sufficient operating style puts the learning experience in a context that is similar to conditions an aspiring grower may experience in the private sector. At the same time, the unusually wide variety of crops grown and the community and educational context of the UBC Farm offers a unique and culturally rich learning environment.

The farm has kitchen, office, and processing areas on-site, plus limited classroom space. A glass greenhouse and two poly houses provide facilities for plant propagation and season extension. Free range chicken flocks and honeybees are the only livestock on site at the moment, but there is a strong interest in diversifying the animal component of the farm. An on-site compost facility turns organic waste from campus into a valuable soil amendment. The farm is home to a heritage apple orchard, numerous teaching gardens and research plots, and a basic complement of powered field equipment and hand tools.

4. Content

The intention of the practicum is to enable students to gain basic practical skills and understand key principles that contribute to sound management of sustainable small-scale farms. The daily and seasonal activities of farming – planning, irrigation set-up, planting, weeding, harvesting and marketing – form the basis of this learning. Topics covered throughout the practicum generally fall into these categories:

Practical growing skills

| | |
|-------------------------------------|----------------------------------|
| Use and maintain hand tools safely | Plan crops and rotations |
| Set up and trouble-shoot irrigation | Hand weed a variety of crops |
| Mark out and prepare seedbeds | Make compost |
| Seed and transplant crops | Harvest, pack and store produce. |
| Calculate soil amendment rates | Present produce for sale |
| Identify crops and weeds | Use small machinery safely |

Underlying knowledge

| | |
|--------------------------------------|--|
| Keeping healthy and safe on the farm | On Farm Food safety |
| Introduction to business planning | Post-harvest handling and storage |
| Promoting biodiversity | Managing soil fertility |
| Managing weeds | Managing plant pathogens |
| Managing arthropod pests | Principles and practice of irrigation |
| Biogeoclimatic regions of B.C | Marketing |
| Free range egg production | Introduction to plant genetics & seed-saving |

A Note on Marketing

Farm produce is marketed through three main channels: at our seasonal markets, through our Community Supported Agriculture (CSA)¹ box program, and through direct sales to campus food providers and local restaurants. Harvest, and storage of field crops requires intensive labour on the part of all the students, especially in the second half of the program. Throughout the season, students are responsible for

¹ Through our CSA program, local residents pay the farm a set price in the spring and then receive a weekly share of produce harvested by students, staff, students, and volunteers.

harvesting, packing, weighing, setting up the marketing area, pre-packing orders, and selling the produce.

Students take on market duties on a rotational basis as the season progresses. Responsibilities include packing CSA boxes, setting up and vending at the market/campus sales and detailed record keeping. All students are expected to participate in marketing endeavours.

5. Instructional Techniques

Most of the learning in the practicum happens through doing, and the Field Mentor, Field Production Coordinator and field staff will work alongside students in the field. This hands-on mentorship forms the core of the learning experience, and field activities take place rain or shine. The field work involves strenuous physical work in all weather conditions, and students are encouraged to apply for the program only if they are comfortable with the physical requirements of farm work. We structure the program to ensure that all students experience a variety of tasks. **Applicants are asked to note that involvement in this scale of production also involves sustained periods of work on tasks such as weeding and mulching.**

A strong group learning environment is fostered, and the theoretical framework for the practical field skills will be explored through field walks, discussions, record-keeping, applied exercises, lectures and readings. The following table outlines instruction methods used in the practicum:

| | |
|--|---|
| <p style="text-align: center;">Field Work</p> <ul style="list-style-type: none"> • ~70% of total time | <p>Working in the field alongside experienced staff on a diverse range of field tasks forms the core learning experience of the practicum. The nature of the field work will reflect the farm’s seasonal priorities. Field work involves strenuous physical labour in all weather conditions.</p> |
| <p style="text-align: center;">Farm walks, Lectures and Educational Activities</p> <ul style="list-style-type: none"> • ~30% of total time | <p>The Education Mentor, farm staff, and visiting experts will provide theoretical instruction through: supplementary farm walks, discussions, lectures, readings, record keeping and applied exercises.</p> |
| <p style="text-align: center;">Farm Visits</p> <ul style="list-style-type: none"> • 3-4 visits per year | <p>Visits to established local farms will provide a perspective on how innovative systems are developed by producers to secure a viable niche.</p> |

Personal Garden Plots

Students will have the opportunity to grow produce in their personal UBC Farm garden plots. The opportunity to learn from others' growing styles, to have total responsibility and to experiment, increases students' confidence in their own skills. Regular time for plot work is included in the schedule, during which time the Mentors will provide feedback and guidance to students in their plots. Regular time outside program hours is also needed for tending to personal plots and should be taken into consideration by prospective students. Typically, the establishment of plots in the early season requires the highest number of extra hours.

6. Practicum Instructors and Staff

Students learn and work with a diverse team. Some of the people involved in the practicum include:

Field Mentor: The students' primary field contact. The Field Mentor delivers many of the practical instruction sessions, and also works alongside students during field activities.

Education Mentor: Ensures that the behind-the-scenes coordination (e.g. communications, guest lectures, farm visits, scheduling etc.) runs smoothly. The Education Mentor is also responsible for the supplementary educational activities.

Market Manager: is responsible for selling the produce. They train and support the students in their marketing duties at the farmer's market and campus sales.

Field Production Coordinator: Manages the production-oriented field operations at the UBC Farm, and also provides field instruction.

Farm Team: Other UBC Farm staff, (including students with previous experience working at the UBC Farm) also work alongside the practicum students, providing peer instruction and mentorship (and maintaining a vibrant, energetic atmosphere in the field!).

Program Coordinator: Responsible for overall coordination of the Centre for Sustainable Food Systems, providing management for a full range of academic and community initiatives.

UBC Faculty: Faculty members share their expertise on a range of topics through guest workshops and lectures.

7. Weekly Schedule and Course Dates

| | SPRING | SUMMER | FALL |
|----------|---|--|---|
| Months | March, April (First day: Sat March 12) | May, June, July, Aug | Sept, Oct, Nov (Last day: Sat Nov 5) |
| Hours/wk | ~7 hours/wk | ~21 hours/wk | ~12 hours/wk |
| Schedule | Sat (9-5) | Wed/Thurs (9-12) Fri (9-5) Sat (8-5) | Sat (8-5) <u>Either</u> Thurs (9-5) <u>Or</u> Fri (9-5) |

In total this part-time practicum will deliver approx 520 hours of instructed sessions and will require an average of 5 hours independent study per week, with some weeks requiring more or less depending on the season. Students participate in an additional campus sales rota on Wednesday afternoons on pre-arranged dates.

Please note: In addition to balancing practicum hours with employment and/or school obligations, it is essential that participants leave themselves adequate time for reflection on course activities and materials, personal affairs, rest and recreation. Prospective students should also remember to take the time travelling to and from the farm into account. This is an intensive program and we recommend that students **budget for a minimum of one day off per week**. The quality of your experience will be significantly impacted by how much energy you are able to bring to the practicum

Students are expected to participate fully in the program by being available for all scheduled hours. Participation in 90% of practicum hours is a requirement for completion of the program. In the case of unavoidable non-recurring absences some hours may be made up outside of regularly scheduled shifts.

Students will have a 1 week vacation mid-program.

Rotational positions of responsibility, such egg collection, cultivations, seeding and selling at market will be scheduled in advance.

The part-time structure of the program in is intended to offer flexibility for those wishing to continue part-time work or school commitments through the duration of the practicum. The lack of on-site housing is a significant consideration in the decision to keep the practicum at part-time only. In future years, it is quite possible that the practicum may be offered as a full-time option as well, particularly if on-site housing options are secured.

8. Living Scenario/Community

Currently, we cannot offer housing as a part of the practicum and students are expected to have their own accommodations. In the future, we are very interested in including on-site accommodations as part of the program.

A shared kitchen facility is available at the farm, and students have the option to use this area for food preparation and are welcome to share meals with farm staff and volunteers. Participation in group meals is optional. As the kitchen and shared indoor spaces are in continual use by a wide variety of academic and community users, students are asked to respect the booking system and must participate in keeping shared spaces clean and maintained. The weekly Friday lunch, where we share food and time together on busy harvest Fridays, is enjoyed by staff, students and volunteers alike.

The farm hosts a number of volunteer, and social events through the course of the year, many of which our students are welcome to attend. We do ask that all students and volunteers respect the farm's closing times, and respect the privacy of the farm's live-in caretakers.

As the farm is a public facility and a part of the University of British Columbia campus, courtesy towards the visiting public, customers, and academic users is essential. All participants in the practicum become representatives of the UBC farm, and it is of considerable strategic importance for the farm's long-term future to maintain a public-friendly, professional image.

9. Fees and Payment for 2011

The cost for the 8 month (520 hour) 2010 program is **\$3000 CDN**. In 2011 Sowing Seeds will be in its 4th year, and we are proud of the significant growth and program development that has occurred since its launch in 2008. At the same time, we acknowledge that practicum development and improvement is an ongoing process, and participants will be expected to provide constructive feedback.

Upon acceptance to the Sowing Seeds Practicum, a non-refundable registration deposit of \$300 is required to hold your place. The remaining fees (\$2700) are due the first day of class (Saturday March 12th 2011) Withdrawal from the program prior to the end date is permissible with written notice to the UBC Farm. Pro-rated refunds of the \$2700 will be offered until Monday May 9th 2011. No refunds will be available for withdrawal after May 9th 2011.

UBC Students: In 2011 we are offering a fee discount for students who register, and successfully earn credits, for a directed studies based on their Sowing Seeds Practicum. In recognition that directed studies students will have to pay twice(to UBC for the directed studies credits, and to UBC Farm for the Sowing Seeds Practicum) we will refund \$400 to students once Directed Studies Credits have been earned (Practicum fee: \$2600 vs \$3000).

Please note that the Sowing Seeds Program is not subsidized by external grants, and so all program costs must be covered by course fees and proceeds from farm-gate sales. The \$3,000 course fee represents approximately 40% of the per-participant cost of running the program. Our goal is to make the program as affordable and accessible as possible, while continuing to cover our operating costs.

10. Visiting the UBC Farm

We strongly encourage prospective students to visit the farm and meet UBC Farm staff prior to applying to the practicum. We believe this gives applicants a better understanding of the hands-on nature of the program along with a better sense of the UBC Farm community. Interested participants are invited to join in a volunteer session and get their hands dirty! Also, the UBC Farm will be hosting a **Practicum drop-in Open House on Saturday September 18th from 2-6 pm.** Potential applicants are encouraged to come out, meet UBC Farm staff and join a farm tour with our current 2010 students. There will be plenty of opportunities to ask questions. The Open House is a drop in event and no RSVP is required.

11. Criteria for Selection

The goal of our program is to prepare future sustainable farmers, scientists, teachers, and community leaders to take the next step in an agricultural career. Therefore, in our selection process we strive to choose the individuals who seem most prepared to maximize their learning and to then use it for their work and studies.

In choosing individuals who will work together for 8 months, we are in effect creating a community. Out of the pool of applicants, we attempt to achieve a balance of interests, geographical and cultural origins, ages, and gender. Consequently, there is no one "preferred" type of applicant. We carefully consider each application in relationship to the entire pool of applicants. Our students come from diverse backgrounds, yet they have in common a strong interest in sustainable farming and gardening, as well as motivation and enthusiasm. This practicum is geared to beginners, and so may not be suitable for individuals with substantial field experience, but we welcome all applicants.

That said, the selection committee looks highly upon applicants who demonstrate thoughtful consideration of what this program offers and the degree to which it fits their long-term learning/professional objectives. In 2011 we are looking for increased participation from undergraduate students, however we continue to welcome applications from the general public.

Further, the committee is looking for applicants who have carefully considered how the Sowing Seeds Practicum will logistically fit with their other life commitments. In addition to balancing practicum hours and employment obligations, it is essential that participants leave themselves adequate time for reflection, personal affairs, rest and recreation. This is an intensive program, and we recommend that students

budget for AT LEAST one day off per week. The quality of your experience will be significantly impacted by how much energy you are able to bring to the practicum.

Applicants must be at least 20 years old.

Finally, because we are a small program still in development **we currently cannot accept foreign applicants**. In the future we hope to become more accessible to an international audience.

12. How to Apply

Applications for the 2011 season will shortly be available on our website.

Applications are accepted until October 29th 2010. Applicants will receive a response by the end of December 2010. We look forward to hearing from you!

13. Further Questions ?

If you have questions that this document does not answer, please look at the current information on the website, or send an e-mail to ubcfarm.seeds@gmail.com

The Sowing Seeds project was implemented from 2008-2009 as an activity of the Organic Sector Development Program component of the Agri-Food Futures Fund, funding for which is provided through the Canada-British Columbia Framework Agreement on Agricultural Risk Management.