



Integrating SEEDS Research projects in Biology Lab courses

Biology Retreat (August 9, 2016)

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Biology Program, Department of Botany



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Place & Promise: The UBC Plan

“Encourage and involve collaboration of faculty, staff and undergraduate students in developing and implementing sustainability-related research projects using UBC as a living laboratory”.



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What is the UBC SEEDS Program?

Social Ecological Economic Development Studies

- Coordinates and supports partnerships between staff, faculty and students
- Advances UBC's commitment to explore and exemplify sustainability on campus

<http://sustain.ubc.ca/courses-teaching/seeds>



STAFF


STUDENT

FACULTY



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CAPSTONE: SCIE 420			
Sustainability Project			
Project-based: Community Service Learning, SEEDs, City Studio			
Year 3-4	BIOLOGY CORE: <i>Examples include:</i> <ul style="list-style-type: none">• BIOL 416 (Conservation)• BIOL 420 (Marine Conservation and Sustainability)• BIOL 4xx (Integrating Environmental Sustainability)	REAL WORLD: <ul style="list-style-type: none">• SEEDS• Community Service Learning (CSL)• Co-op• UBC Farm• City Studio• BIOL 448• Go Global CSL	SUSTAINABILITY ELECTIVES: <i>Includes:</i> <ul style="list-style-type: none">• Arts• Breadth• Life Science Selections• Selections from other faculties 
	Year 2	BIOL 230	SCIE 220 Introduction to Sustainability
Year 1	BIOL 140 BIOL 112 BIOL 121	SCIE 120 Topics in Sustainability Science	

Credit: Sho

Credit: Shona Ellis

Research-based Courses using SEEDS projects

Three undergraduate courses:

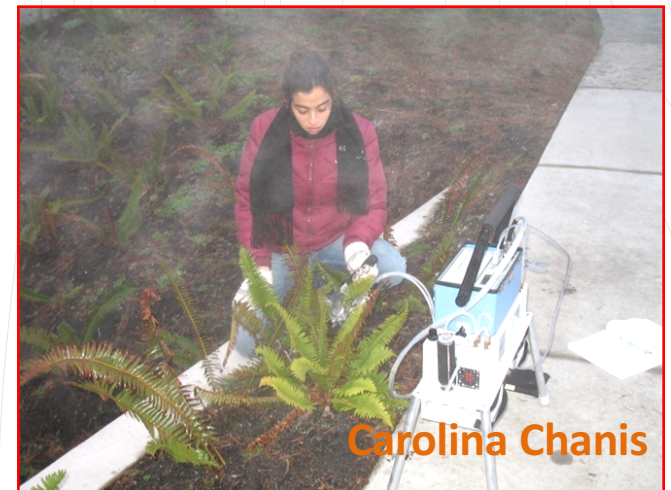
1. **Plant Physiology I (BIOL 351/APBI 351/ FRST 311)**
2. **Plant Physiology II (BIOL 352)**
3. **Directed studies in Biology (BIOL 448)**



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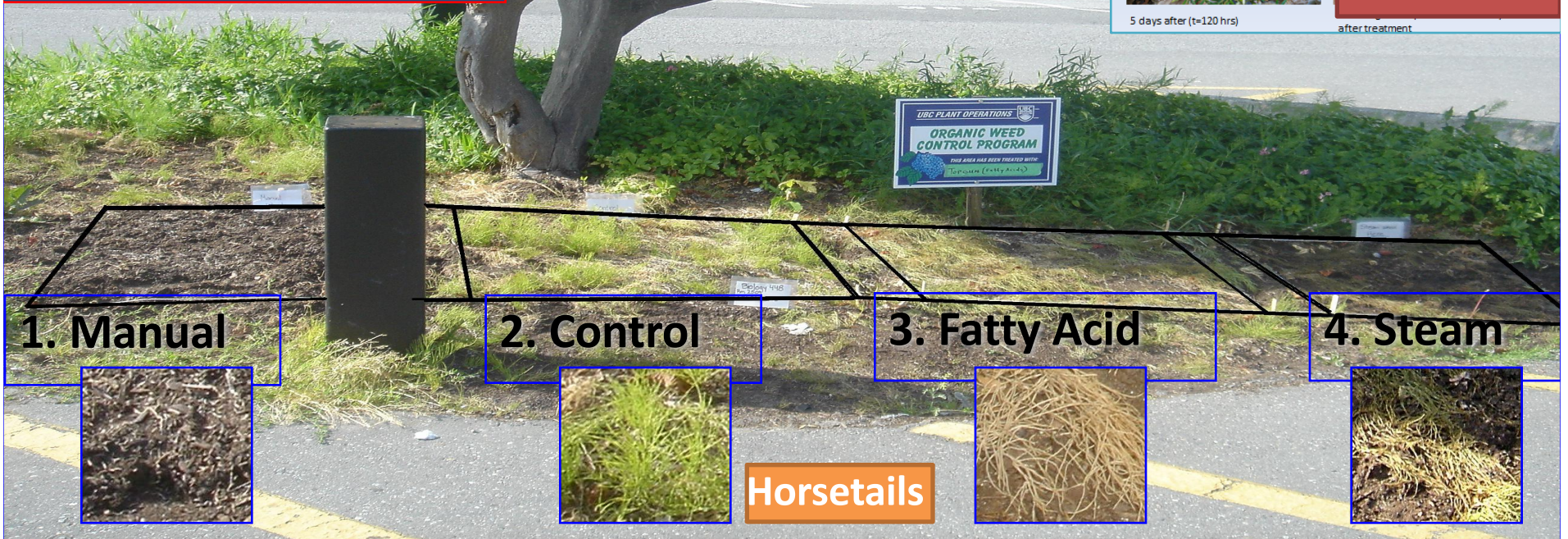
“Carbon Sequestration by Plants”



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“Sustainable Organic Weed Control”



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SEEDS Project Reports and Presentations

1. “3MT” lab presentations
2. **Presentations to Plant Ops/Landscaping unit staff**
3. Presentations at the UBC Multidisciplinary Undergraduate Research Conference (**MURC**)
4. Research reports for the **online SEEDS Library**



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Student Reports Published on SEEDS Library

<http://sustain.ubc.ca/courses-teaching/seeds/seeds-library>

Project Themes



BIODIVERSITY



BUILDINGS



CLIMATE



COMMUNITY



ENERGY



FINANCE



FOOD



HEALTH



LAND



MATERIALS



PROCUREMENT



TRANSPORTATION



WASTE



WATER



WELLBEING






SEEDS Library

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	Year	Authors	Faculty	Staff	Course Code	Categories
The Seasonal and Environmental Effects on Photosynthetic Efficiency of Deciduous and Evergreen Tree Species during Winter and Spring Season in Vancouver	2013-2014	Joy Cheng	Santokh Singh Botany, Department of	Jarnail Mehroke Botany, Department of Jeff Nulty Building Operations Vancouver Campus	BIOL 448	  
An Investigation into Green Laundry Products	2013-2014	Lindsay Pistner, Dean Grimm, Jennifer Goodale	Carla Paterson Applied Science, Faculty of	Cate Morrison Student Housing and Hospitality Services Victoria (Vicki) Wakefield Purchasing Manager	APSC 261	 



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UBC SEEDS

Brenda Sawada
Liska Richer



Thank you!

Questions?



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