

MAPLE SYRUP SEMESTER

Spring 2011
M 1:00-3:00
W 1:00-3:00
Location

Professor TBD
Contact info
Office hours

COURSE HISTORY AND INFORMATION

In the spring of 2010, Rebecca Carlson ('11) received an Entrepreneurial Grant through the Center for Experiential Learning to establish a sugarbush on campus. In the winter of 2011, a sugarshack was built behind Hoyme hill in time for the spring sugaring season. The sugar maple trees in the groves by the shack were tapped to collect 500 gallons of sap, which was boiled down to 10 gallons of syrup in the evaporator on site. This course is a product of Rebecca's senior environmental studies capstone project intended to connect students, faculty and the community to sugarbushing and to keep the St. Olaf Sugarbush sustainable for years to come.

RESOURCES

1. Extension handbook
2. Mapletrader.com
3. People
4. www.sto-umyummy.blogspot.com

ASSESSMENT

<i>Activity</i>	<i>Percentage of total grade</i>
Class lecture	20
Individual project	20
Reflections	10
Participation	50

Grading Scale

	B+ = 87-90	C+ = 77-80	D+ = 67-70
A = 93-100	B = 83-87	C = 73-77	D = 63-67
A- = 90-93	B- = 80-83	C - = 70-73	D - = 60-63

RESPONSIBILITIES

The primary goal of this course is to run the sugarbush. Because the sugaring season is in the beginning of spring, the class will meet two times a week for the first half of the semester. Students will be responsible for teaching one class period (to be determined on the first day of class), attend field trips (most during class times), an individual project, running the sugarbush, and sharing the experience with others. The final will be a community day to share the season with students, faculty and the community designed and led by the students.

Sugarbushing is very labor intensive and will require the efforts of many. The season is short, but it is **VERY** (bold, all caps, underlined and italicized...get the point?) energy intensive. Students must understand that it will be a lot of work during the season and will require work outside of class. For this reason, the second half of the semester is non-scheduled time.

Homework:

Lecture:

On day of lecture, a three page single spaced paper with 5-10 sources is due. Presentation must cover material suggested in objectives (and more), last ~45 minutes, contain 1-2 activities and have 10-15 minutes discussion.

Individual project:

Each student will be require to work on an individual project throughout the course. Presentations can be creative and must be geared towards sharing the experience with the St. Olaf community. Suggested topics are below.

Reflection paper:

4-5 page single spaced paper on your personal experience with the sugarbush on campus. What went well, what went poorly, what can be improved, what you took from the course, how the community involvement went, how much you participated in running the sugarbush, what you learned from the field trips, how the organization of volunteers went, how the individual project went, etc.

Tasks to complete during sugarseason	Ideas for independent projects
<ul style="list-style-type: none"> • Chop and prepare wood • Maintenance on shack • Planning, delegating tasks • Training in volunteers • Tapping trees • Transporting sap • Boiling down • Volunteer coordinator • Blogging • Bottling syrup and labeling containers • Selling sap • Preparing for next year • Take down and clean up 	<ul style="list-style-type: none"> • Tubig vs buckets for sap collection • Sap yield as fxn of tree location? • Creating a business plan for sugarbush • Pumping system efficiency • Tubing/tapping techniques • Pricing/advertising/marketing • Curriculum for kids • Outline for sugarbush tour • New technology cost benefit analysis (apply for a grant?) Reverse osmosis? Vacuum system? • Sugar content as season goes on • Diameter of the tree vs sap volume • Historical sugaring presentation • Volunteer coordinator • How to continue this project in years to come

SCHEDULE

****This schedule is subject to change according to weather, time and duration of sugar season*

Date	Topic	Activity
2/6	Introduction to maple syruping	<ul style="list-style-type: none"> • History of St. Olaf sugarbush • Tour St. Olaf Sugarbush • Look at blog (www.sto-umyummy.blogspot.com) • Expectations for class • Divide class lectures up • Talk about individual projects
2/8	Work day	<ul style="list-style-type: none"> • Pick individual project • Maintenance on shack
2/13	Lecture 1: History of maple syrup Lecture 2: Physiology of Maple Syrup	Objectives: <ul style="list-style-type: none"> • Cultural significance • How long have people been using it • Local food context • Who has used maple syrup • Other local sources of sugar? Objectives: <ul style="list-style-type: none"> • What happens in the summer, fall, winter, and spring • What is happening on a cellular level • Why does the sap rise in the spring • What other trees does this happen in
2/15	Work Day	Maintenance on shack, prepare wood
2/20	Lecture 3: Boiling down Lecture 4: New Technology	Objectives: <ul style="list-style-type: none"> • How do you make syrup from sap • How is sap collected • How much syrup is produced in America? In Minnesota? • Examples of MN sugar producers Objectives: <ul style="list-style-type: none"> • How has technology changed maple syruping • Old technology vs new technology, advantages and disadvantages of each • Commercialization of maple syrup • Aunt Jemima and Log Cabin • Reverse osmosis, vacuum system, equipment
2/22	Planning session Class Field Trip	Make a list of work to be done (15 min) L and R Produce (http://www.lrpoultryproduce.com/pb/wp_01be3caf/wp_01be3caf.html)
2/27	Work day	<ul style="list-style-type: none"> • Prepare for upcoming season • When to put in taps (given the weather)

		<ul style="list-style-type: none"> • Volunteer day? • Plan work outside class
2/29	<p>Start to plan community event</p> <p>Lecture 5: Marketing Strategies</p> <p>Lecture 6: Connection to nature</p>	<p>Set a date, plan preliminary structure</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Selling syrup • FDA guidelines • USDA guidelines • Small producer vs large producer • Advertising maple syrup • Example of a business plan • Can you make a living selling syrup? At what scale? <p>Objectives:</p> <ul style="list-style-type: none"> • Importance of a connection to nature • Wendel Berry • Last Child in the Woods
3/5	Work Day	TBD
3/7	Work Day	TBD
3/10	Weekend Field Trip	Somerskogan (http://www.mnmaplesyrup.com/)
3/14	Work Day	TBD
Spring break?	Who will run the bush?	Figure out who will be responsible for running the sugarbush over spring break
3/26	Work Day	TBD
3/28	Reflection and celebration	Gather and reflect on season. Eat ice cream and syrup
4/2	Individual project	Present individual projects
4/9	Next year?	How will the sugarbsh be run next year?