

**PLNTSOIL 115: Plants, Soils, and the Environment**  
**Spring 2003 - Course Outline**

<b>Date</b>	<b>Topic</b>	<b>Reading Assignment</b>	<b>Notes</b>
TU Jan. 28 <sup>th</sup>	Course Overview Sustainability & Stewardship	Chapter 1 (pp. 1-20)	
TH Jan. 30 <sup>th</sup>	Ecosystems & Sustainability	Chapter 2 (pp. 25-39)	
TU Feb. 4 <sup>th</sup>	Ecosystems & How they work	Chapter 3 (pp. 53-78)	
TH Feb. 6 <sup>th</sup>	Basic Plant Science	Class Notes Only	
TU Feb. 11 <sup>th</sup>	Plant Ecology & Biomes	Chapter 2 (pp. 42-46)	Slides to be shown
TH Feb. 13 <sup>th</sup>	Film: Earth on Edge	Handout provided	In-class film Discussion topic assigned
TU Feb. 18 <sup>th</sup>	NO CLASS		MONDAY SCHEDULE
TH Feb. 20 <sup>th</sup>	Discussion	Handout	In-class exercise*
TU Feb. 25 <sup>th</sup>	<b>In-class Hourly Exam</b>		<b>EXAM #1</b>
TH Feb. 27 <sup>th</sup>	Food and Agriculture	Chapter 10 (pp. 241-249)	
TU Mar. 4 <sup>th</sup>	Biodiversity & Agriculture	Chapter 5 (pp. 130-essay)	In-class viewing of video.
TH Mar. 6 <sup>th</sup>	Plant Breeding & Biotechnology	Chapter 5 (pp. 113-116) Chapter 10 (pp 249-251)	Guest Lecturer
TU Mar. 11 <sup>th</sup>	Pests & Pesticides	Chapter 17 (pp. 415-436)	Guest Lecturer
TH Mar. 13 <sup>th</sup>	NO CLASS		Field trip trade-off
TU Mar. 25 <sup>th</sup>	Sustainable Agriculture: what is it really?	Notes & handouts	Guest Lecturer Discussion topic assigned
TH Mar. 27 <sup>th</sup>	Community Food Systems	Chapter 10 (pp. 252-260) & handouts	Guest Lecturer
TU April 1 <sup>st</sup>	Discussion	Handout	In-class exercise*
TH April 3 <sup>rd</sup>	<b>In-class Hourly Exam</b>		<b>EXAM #2</b>
TU April 8 <sup>th</sup>	Soils	Chapter 8 (pp. 189-199)	Slides to be shown
TH April 10 <sup>th</sup>	Soil Conservation	Chapter 8 (pp. 195-205)	Slides to be shown
TU April 15 <sup>th</sup>	NO CLASS		Field trip trade-off
TH April 17 <sup>th</sup>	Water: Hydrologic Cycle	Chapter 9 (pp. 209-218)	
TU April 22 <sup>nd</sup>	Water: too much - too little	Chapter 9 (pp. 219-233)	
TH April 24 <sup>th</sup>	Freshwater Wetlands	notes & reserved reading	Slides to be shown
TU April 29 <sup>th</sup>	Water Pollution & Prevention	Chapter 18 (pp. 439-453)	Discussion topic assigned

**Course schedule continued on reverse side**

**Course schedule continued.**

TH May 1 <sup>st</sup>	Wastewater Treatment: A Global Perspective/Alternative Solutions	Chapter 18 (pp. 453-461) Notes & handouts	Guest Lecturer
<b>MAY 3<sup>rd</sup> SATURDAY</b>	Local Field Trip: Geomorphology & Soils	Class handouts	<b>*SATURDAY*</b> Mandatory exercise
TU May 6 <sup>th</sup>	Discussion		In-class exercise *
TH May 8 <sup>th</sup>	<b>In-class Hourly Exam</b>		<b>EXAM #3</b>
TU May 13 <sup>th</sup>	Extra Credit Projects	Last Day of Class	Attendance will be taken*

**Final Exam** (Cumulative and optional) will be scheduled during final exam week (5/19-23/03).

## PLNTSOIL 115: Plants, Soils, and the Environment - Spring 2003

**Time:** Tuesdays and Thursdays, 2:30 - 3:45 p.m.  
Mandatory Saturday Field Exercise: May 3rd

**Place:** 209 French Hall

**Instructor:** Dr. Deborah Picking  
206 French Hall  
413-545-2249  
[dpicking@pssci.umass.edu](mailto:dpicking@pssci.umass.edu)

**Office Hours:** M Tu Th 10:00 - 11:45 a.m.  
Tuesday 3:45 p.m. - 4:30 p.m.  
or by appointment

**Graduate T.A.:** Patricia Groome  
303 French Hall  
577-3303  
[arruth@together.net](mailto:arruth@together.net)

**Undergrad. T.A.:** Mark Zammuto  
546-2547  
[m\\_zammuto@yahoo.com](mailto:m_zammuto@yahoo.com)

**Mark's Office Hours:** by appointment

**Patty's Hours:** Mondays 12:30 - 2:00p.m.

**Required Text:** *Environmental Science*, 8<sup>th</sup> edition, by Nebel & Wright. (One copy will be on reserve at the UMass Tower Library - 3<sup>rd</sup> floor.)

**Course Objective:** To begin to understand the biological and physical relationships between plants, soils, and the environment. This course will examine how various human activities impact the environment, with specific attention to impacts on plants and soils. This course will focus on the areas of ecosystem structure and function, agriculture and food access, soil and its preservation, wetlands, water pollution and treatment technologies, and resource conservation.

**Course Requirements:**

Three (In-class) Hourly Exams .....	25% each
Final Cumulative Exam.....	(optional)
Field Exercise .....	4%
Class Participation .....	6%
Three Short Position Papers .....	15%

**Attendance:** Students are responsible for all material covered during lecture and in the assigned readings. Class participation will be evaluated (and attendance taken) during the three scheduled discussion sessions, on the last day of class, and for the field exercise.

**Field Exercise:** A mandatory field exercise will be held Saturday, May 3rd. Appropriate outdoor clothing and waterproof footwear should be worn. Trip will run rain or shine.

**Make-ups:** No changes will be made to the exam schedule, unless the University is officially closed due to bad weather. If this happens, the exam will be administered the next time the class meets. Make-up exams and/or assignments will be permitted at the instructor's discretion, but normally only when a written excuse is provided by a doctor, athletic coach, or Dean of Students. Missed discussion sessions and the field exercise cannot be made up.

## Grading Criteria

<u>Item</u>	<u>Points</u>	<u>Percent of Final Score</u>
Hourly Exam #1	100	25%
Hourly Exam #2	100	25%
Hourly Exam #3	100	25%
Final Exam (optional)	100	(25%)*
Field Day Exercise	16	4%
Three Short Papers (20 pts. Each)	60	15%
Class Participation (4 days @ 6 pts.)	<u>24</u>	<u>6%</u>
Total	400	100%

**\*Final Exam:** This exam is optional and can be used to replace one of the hourly exam scores. The final exam will be cumulative and administered during the Final Exam period.

**Extra Credit:** Up to 20 extra points can be earned for an end of term project. Details will be provided in class. Your intention to participate in the extra credit assignment must be declared to the instructor no later than April 8, 2003.

## Grading Scale

<u>% of Total Points</u>	<u>Letter Grade</u>	<u>Points Earned</u>
92 -100%	A	368 - 400
88 - 92%	AB	352 - 367
80 - 88%	B	320 - 351
76 - 80%	BC	304 - 319
70 - 76%	C	280 - 303
64 - 70 %	CD	256 - 279
60 - 64%	D	240 - 255
< 60 %	F	< 240