

# Course Schedule - Spring 2007

## Crop Sciences

### 112 **Introduction to Crop Sciences** Credit: 4 hours.

Introductory course covering principles of growth, production, protection, and improvement of crop plants. Topics covered include form, function, and uses of crops; mechanisms and factors responsible for plant growth and development; crop pests and pest protection; specific crops; and advances in crop production. Concepts are discussed in lecture and reinforced in corresponding hands-on laboratory sections.

CRN	Type	Section	Time	Days	Location	Instructor
31481	laboratory	AB1	01:00 PM - 03:50 PM	W	room W13 Turner Hall	Stoller, P
31483	laboratory	AB2	09:00 AM - 11:50 AM	R	room W13 Turner Hall	Stoller, P
31487	lecture	AL1	10:00 AM - 10:50 AM	MWF	room W109 Turner Hall	Stoller, P

### 180 **Medicinal Plants and Herbology** Credit: 3 hours.

Same as HORT 180. See HORT 180.

CRN	Type	Section	Time	Days	Location	Instructor
34188	lecture	AL1	11:00 AM - 11:50 AM	MWF	room 160 English Bldg	Briskin, D

### 199 **Undergraduate Open Seminar** Credit: 1 to 5 hours.

Experimental course on a special topic in crop sciences. Topic may not be repeated except in accordance with the Code. May be repeated to a maximum of 12 hours.

CRN	Type	Section	Time	Days	Location	Instructor
10554	independent study		ARRANGED			
10554: Instructor Approval Required						

### 241 **Intro to Applied Statistics** Credit: 3 hours.

Introduces fundamental statistics used to analyze and interpret data in the biological and physical sciences of agriculture, environmental sciences, and related areas. Includes descriptive and inferential statistics, measures of central tendency and dispersion, probability, correlation and regression, and tests of hypotheses. Enhances students' ability to critically assess statistical information encountered in professional and every day activities. Credit is not given for both CPSC 141 and STAT 100 or ACE 261.

This course satisfies the General Education Criteria for a Quant Reasoning I course.

CRN	Type	Section	Time	Days	Location	Instructor
31491	laboratory	AB2	01:00 PM - 02:50 PM	T	room M5 Turner Hall	Bullock, D; Pataky, J
31491: Quant Reasoning I course.						
31493	lecture	AL1	11:00 AM - 11:50 AM	MW	room W115 Turner Hall	Bullock, D; Pataky, J
31493: Quant Reasoning I course.						

**261 *Biotechnology in Agriculture*** Credit: 3 hours.

Basic introduction to the techniques and application of biotechnology to a wide range of agricultural areas, and specific examples are given. May serve as either a terminal course explaining the techniques or as an introductory base for future studies. Same as HORT 261. Prerequisite: Any 100-level course in a biosciences discipline.

This course satisfies the General Education Criteria for a Life Sciences course.

CRN	Type	Section	Time	Days	Location	Instructor
31518	lecture-discussion	A	10:00 AM - 11:20 AM	TR	room W109 Turner Hall	Moose, S
31518: Life Sciences course.						

**265 *Genetic Engineering Lab*** Credit: 3 hours.

Laboratory/discussion course that provides a hands-on introduction to the techniques and principles of genetic engineering, recombinant DNA and the impact of molecular genetics on society. Students will isolate DNA from plants and clone specific genes into bacterial plasmids, perform polymerase chain reactions, DNA restriction analysis and DNA blotting, and discuss the relevance of these techniques to both medicine and agriculture. Prerequisite: A general biology course.

Additional Class Materials Fee Required.

CRN	Type	Section	Time	Days	Location	Instructor
31495	laboratory	A	05:30 PM - 09:20 PM	M	room M5 Turner Hall	Lambert, K

**293 *Off-Campus Crop Sci Internship*** Credit: 1 to 5 hours.

Supervised, off-campus experience in a field directly pertaining to a subject matter in crop sciences. May be repeated to a maximum of 10 hours. For registration in this course, students should contact the Department Teaching Coordinator. Prerequisite: Sophomore standing, cumulative GPA of 2.0 or above at the time the internship is arranged, and consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
10555	independent study		ARRANGED			
10555: Instructor Approval Required						

**294 On-Campus Crop Sci Internship** Credit: 1 to 5 hours.

Supervised, on-campus learning experience with faculty engaged in research. May be repeated to a maximum of 10 hours. For registration in this course, students should contact the Department Teaching Coordinator.  
Prerequisite: Sophomore standing, 2.0 GPA, consent of the advisor, and consent of the Department Teaching Coordinator.

CRN	Type	Section	Time	Days	Location	Instructor
10558	independent study		ARRANGED			
10558: Instructor Approval Required						

**295 Undergrad Research or Thesis** Credit: 1 to 4 hours.

Individual research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. May be repeated in the same or subsequent terms. No more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward degree. Prerequisite: Junior standing, cumulative GPA of 2.5 or above at the time the activity is arranged, and consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
10560	independent study		ARRANGED			
10560: Instructor Approval Required						
47450	independent study	KLS	ARRANGED			Steffey, K

**336 Tomorrow's Environment** Credit: 3 hours.

Introduction to interdisciplinary methods of analysis of environmental problems in a finite world; examination of the concept of the limits to growth; development of a working understanding of natural systems and environmental economics; and examination of various management strategies (technical, economic, and social) that can be used to improve environmental quality. Same as CHLH 336, and ENVS 336. Prerequisite: One course in the life sciences and one course in the social sciences, or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
31524	lecture-discussion	A	02:30 PM - 03:45 PM	TR	room W109 Turner Hall	Rayburn, A
31527	lecture-discussion	JH	02:30 PM - 03:45 PM	TR	room 144 Bevier Hall	Rayburn, A
31527: James Scholars course. This section for James Scholars only.						

**352 Plant and Animal Genetics** Credit: 4 hours.

The principles of heredity in relation to plant and animal improvement. Same as ANSC 340, and NRES 352.

Prerequisite: IB 103 or IB 104.

CRN	Type	Section	Time	Days	Location	Instructor
31497	laboratory	AB1	01:00 PM - 02:50 PM	T	room 393 Bevier Hall	Diers, B; Beever, J
31500	laboratory	AB2	03:00 PM - 04:50 PM	T	room 393 Bevier Hall	Diers, B; Beever, J
31502	laboratory	AB3	08:00 AM - 09:50 AM	T	room M5 Turner Hall	Diers, B; Beever, J
31503	lecture	AL1	02:00 PM - 02:50 PM	MWF	room W109 Turner Hall	Diers, B; Beever, J

**396 Undergrad Honors Res or Thesis** Credit: 1 to 4 hours.

Individual research, special problems, thesis, development and/or design work under the direction of the Honors advisor. May be repeated in the same or subsequent terms. No more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward degree. Prerequisite: Junior standing, admission to the ACES Honors Program, and consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
10562	independent study		ARRANGED			
10562: Instructor Approval Required						

**414 Forage Crops and Pasture Eco** Credit: 3 hours.

Forages, their plant characteristics, ecology, and production; grasslands of farm and range as related to animal production and soil conservation. Offered in alternate years. Prerequisite: CPSC 112.

CRN	Type	Section	Time	Days	Location	Instructor
39176	lecture-discussion	A	10:00 AM - 11:50 AM	TR	room W115 Turner Hall	Tracy, B
46909	online	XM	06:30 PM - 08:30 PM	R		Tracy, B; Hutjens, M
46909: Academic Outreach restrictions and assessments apply, see <a href="http://www.outreach.uiuc.edu">http://www.outreach.uiuc.edu</a> . Class will be delivered via Elluminate and other materials. Class will not meet the week of spring break (3/22). Some lectures will be shorter than others and will not cover the entire 2 hour time allotted. A syllabus will be provided to the student with further details as to the lecture length each week. Course will be comprised of online lecture, additional readings and downloads of materials from the internet and homework assignments. High speed internet access is very helpful for this course. Students should contact the following email address or phone number to order their \$35 discs for this course: <a href="mailto:ansci-it@uiuc.edu">ansci-it@uiuc.edu</a> or 217-333-8276. OnlineMeets 11-Jan-07 - 19-Apr-07. XM Tuition 261, XM Tuition 237, XM Fees 41, and XM Fees 41.00 dollars.						

**418 Crop Growth and Management** Credit: 3 hours.

Crop production and management as influenced by environment, plant species, and cropping system; relates plant growth processes to management practices. Prerequisite: NRES 201 and CPSC 112 or equivalent, or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
31547	lecture-discussion	A	11:00 AM - 11:50 AM	MWF	room W109 Turner Hall	Tracy, B

**428 Weed Science Practicum** Credit: 2 hours.

Intensive course on field diagnostic skills in weed science. Topics include weed and weed seed identification, sprayer calibration, herbicide application, herbicide injury symptomatology, and field diagnostics. Students who complete the course will be encouraged to enter the North Central Weed Science Society weeds contest, which occurs during the summer. Prerequisite: CPSC 226 or CPSC 426 or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
44813	lecture-discussion	A	10:00 AM - 11:50 AM	T	room W13 Turner Hall	Tranel, P
44813: 2 hours						

**431 Plants and Global Change** Credit: 3 hours.

The science of global atmospheric and climate change in the 21st Century. Understanding of how plants, including crops, will respond and may be adapted to these changes. Using plants to ameliorate predicted climate change. Same as IB 440, and NRES 431. Prerequisite: CPSC 112 or IB 103.

CRN	Type	Section	Time	Days	Location	Instructor
31539	lecture	A	05:00 PM - 06:20 PM	TR	room W115 Turner Hall	Long, S; Ainsworth, E

**435 Environmental Toxicology** Credit: 3 hours.

Same as CHLH 461, ENVS 431, and IB 485. See IB 485.

CRN	Type	Section	Time	Days	Location	Instructor
45983	lecture-discussion	A	10:30 AM - 11:50 AM	TR	room 106B8 Engineering Hall	Francis, B
45983: 3 hours						

**436 Conservation Biology** Credit: 4 hours.

Same as ENVS 420, and IB 451. See IB 451.

CRN	Type	Section	Time	Days	Location	Instructor
39490	laboratory	AB1	02:00 PM - 04:50 PM	M	room 136 Burrill Hall	Paige, K
39494	laboratory	AB2	02:00 PM - 04:50 PM	T	room 136 Burrill Hall	Paige, K
47629	laboratory	AB3	02:00 PM - 04:50 PM	R	room 136 Burrill Hall	Paige, K
39487	lecture	AL1	10:00 AM - 10:50 AM	MW	room 243 Mechanical Engineering Bldg	Paige, K

**440 *Applied Statistical Methods I* Credit: 4 hours.**

Statistical methods involving relationships between populations and samples; collection, organization, and analysis of data; and techniques in testing hypotheses with an introduction to regression, correlation, and analysis of variance limited to the completely randomized design and the randomized complete-block design. Same as ABE 440, ANSC 440, FSHN 440, and NRES 440. Prerequisite: MATH 012 or equivalent.

CRN	Type	Section	Time	Days	Location	Instructor
31563	laboratory	AB1	01:00 PM - 02:50 PM	T	room N120 Turner Hall	Bollero, G
31567	laboratory	AB2	03:00 PM - 04:50 PM	T	room N120 Turner Hall	Bollero, G
31570	laboratory	AB3	05:00 PM - 06:50 PM	T	room N120 Turner Hall	Bollero, G
31578	lecture	AL1	08:00 AM - 09:20 AM	TR	room 150 Animal Sciences Laboratory	Bollero, G

**453 *Principles of Plant Breeding* Credit: 4 hours.**

Genetic and cytological variation in crop plants; the production and control of such variation in developing varieties and hybrids; and the maintenance of high quality seed stocks. Same as HORT 453. Prerequisite: IB 103; CPSC 352 or equivalent.

CRN	Type	Section	Time	Days	Location	Instructor
31549	laboratory	AB1	02:00 PM - 02:50 PM	R	room W115 Turner Hall	Kolb, F
	laboratory	AB1	02:00 PM - 03:50 PM	T	room W115 Turner Hall	Kolb, F
31550	lecture	AL1	01:00 PM - 01:50 PM	TR	room W115 Turner Hall	Kolb, F

**477 Biological Control** Credit: 3 hours.  
Same as IB 484. See IB 484.

CRN	Type	Section	Time	Days	Location	Instructor
34672	laboratory	AB1	09:00 AM - 11:50 AM	F	room 147 Armory	Sathyamurthy, R
34673	lecture	AL1	09:00 AM - 09:50 AM	MW	room G20 Foreign Languages Bldg	Sathyamurthy, R

**482 Plant Tissue Culture** Credit: 4 hours.  
Same as HORT 482. See HORT 482.

CRN	Type	Section	Time	Days	Location	Instructor
34214	laboratory-discussion	A	12:00 PM - 01:50 PM	TR	room N107 Turner Hall	Seufferheld, M

**484 Plant Physiology** Credit: 3 hours.  
Same as IB 420. See IB 420.

CRN	Type	Section	Time	Days	Location	Instructor
34657	lecture	A	01:00 PM - 02:20 PM	TR	room 305 Materials Science and Eng Bld	Briskin, D

**498 Undergrad Crop Sci Seminar** Credit: 1 hours.  
Course includes reports and oral presentations on special topics in a field of study directly pertaining to subject matter in crop sciences. Prerequisite: Senior standing.

CRN	Type	Section	Time	Days	Location	Instructor
31538	discussion-recitation	A	04:00 PM - 04:50 PM	R	room W109 Turner Hall	D'Arcy, C; Kolb, F

**499 Seminar** Credit: 0 to 4 hours.  
Group discussion or an experimental course on a special topic in crop sciences. Approved for both letter and S/U grading. May be repeated to a maximum of 12 hours.

CRN	Type	Section	Time	Days	Location	Instructor
10564	independent study		ARRANGED			
10564: Instructor Approval Required						
43629	laboratory	AB1	01:00 PM - 02:50 PM	W	room N120 Turner Hall	Bollero, G
43629: 4 hours App. Multivariate Statistics						
46196	lecture	AL	03:00 PM - 04:20 PM	TR	room N107 Turner Hall	Bollero, G
46196: App. Multivariate Statistics						

**518 *Crop Growth and Development* Credit: 4 hours.**

Study of the physiological processes involved in growth and development of crop plants and the interaction of these processes with the environment that influences productivity. Prerequisite: CPSC 418 or CPSC 484.

CRN	Type	Section	Time	Days	Location	Instructor
31648	lecture	A	09:00 AM - 09:50 AM	MWF	room N107 Turner Hall	Below, F

**540 *Applied Statistical Methods II* Credit: 5 hours.**

Statistical methods as tools for research. Principles of designing experiments and methods of analysis for various kinds of designs, experimental (completely randomized, randomized complete block, split plots, Latin square) and treatment (complete factorial); covariate analysis; use of SAS for all analyses. Prerequisite: CPSC 440 or equivalent.

CRN	Type	Section	Time	Days	Location	Instructor
31664	lecture	AL1	03:00 PM - 04:50 PM	MW	room W109 Turner Hall	Bullock, D
31657	laboratory-discussion	AY1	01:00 PM - 02:50 PM	R	room N120 Turner Hall	Bullock, D
31661	laboratory-discussion	AY2	03:00 PM - 04:50 PM	R	room N120 Turner Hall	Bullock, D

**565 *Perl & UNIX for Bioinformatics* Credit: 2 hours.**

This intensive course is an introduction to high-throughput bioinformatics and genome data analysis. An introduction to programming with Perl and Bioperl will be given, and students will learn to write scripts relevant to their own research goals. We will also cover the use of UNIX and Perl for automating and customizing bioinformatics tools. Prerequisite: Graduate status or consent of instructor. In addition, familiarity with DNA and protein sequence data, and basic Windows computing skills are required.

CRN	Type	Section	Time	Days	Location	Instructor
46730	laboratory	AB1	03:00 PM - 04:50 PM	W	room N120 Turner Hall	Hudson, M
46730: Meets 12-Mar-07 - 02-May-07.						
46726	lecture-discussion	AE1	02:00 PM - 04:50 PM	M	room N120 Turner Hall	Hudson, M
46726: Meets 12-Mar-07 - 02-May-07.						

**566 *Plant Gene Regulation*** Credit: 4 hours.

Current topics and literature on the function and regulation of higher plant genes. Topics of emphasis: transposable elements, their effect on gene expression and variation, and uses in tagging and isolating genes; the developmental, tissue specific, or environmental regulations of plant genes; the structure, synthesis, subcellular targeting, and regulation of major cereal and legume seed proteins; the use of genetic engineering to explore the regulation of plant genes or to alter traits of agricultural importance. Same as HORT 566. Prerequisite: CPSC 352, MCB 350, or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
43483	lecture-discussion	A	11:00 AM - 11:50 AM	MWF	room N107 Turner Hall	Vodkin, L
43483: 4 hours						

**569 *Applied Bioinformatics*** Credit: 4 hours.

Same as ANSC 542. See ANSC 542.

CRN	Type	Section	Time	Days	Location	Instructor
40264	lecture-discussion	A	10:00 AM - 11:20 AM	TR	room N120 Turner Hall	Rodriguez-Zas, S; Caetano-Anolles, G

**588 *Plant Biochemistry*** Credit: 4 hours.

Enzymes and pathways involved in plant intermediary metabolism. Basic cell physiology, bioenergetics, and hormonal regulation of metabolism. Same as HORT 588, and IB 524. Prerequisite: CPSC 484 and MCB 350.

CRN	Type	Section	Time	Days	Location	Instructor
47009	lecture-discussion	CH	06:30 PM - 09:45 PM	T	room ARR 1XCCHS	Briskin, D
47009: Interactive VideoMeets 16-Jan-07 - 24-Apr-07.XM Tuition 261, XM Tuition 237, XM Fees 41, and XM Fees 41.00 dollars.						
47009: Academic Outreach restrictions and assessments apply, see <a href="http://www.outreach.uiuc.edu">http://www.outreach.uiuc.edu</a> . This class is being held via videoconference in the Conference Room, 508 S.Sixth Street, UIUC.						

47011	lecture-discussion	RL	06:30 PM - 09:45 PM	T	room ARR 1XRLC	Briskin, D
47011: Interactive VideoMeets 16-Jan-07 - 24-Apr-07.XM Tuition 261, XM Tuition 237, XM Fees 41, and XM Fees 41.00 dollars.						
47011: Academic Outreach restrictions and assessments apply, see <a href="http://www.outreach.uiuc.edu">http://www.outreach.uiuc.edu</a> . Plant Biochemistry will be held at Shawnee Community College in Classroom H1033 via 2-way video.						
47010	lecture-discussion	SP	06:30 PM - 09:45 PM	T	room ARR 1XUIS	Briskin, D
47010: Interactive VideoMeets 16-Jan-07 - 24-Apr-07.XM Tuition 261, XM Tuition 237, XM Fees 41, and XM Fees 41.00 dollars.						
47010: Academic Outreach restrictions and assessments apply, see <a href="http://www.outreach.uiuc.edu">http://www.outreach.uiuc.edu</a> . This class is being held via videoconference in the Brookens Building-Room 141A, UIS.						

**593 *Adv Studies in Crop Sciences* Credit: 1 to 8 hours.**

Directed studies of selected problems or topics relevant to Crop Sciences. Study may be in one of the following fields: 1) Plant Breeding and Genetics; 2) Plant Molecular Biology; 3) Plant Physiology; 4) Crop Production and Ecology; 5) Biometrics; 6) Plant Pathology; 7) Entomology; and 8) Weed Science. Prerequisite: Consent of instructor. Instructor Approval Required.

CRN	Type	Section	Time	Days	Location	Instructor
10567	independent study		ARRANGED			
10567: Instructor Approval Required						
45452	independent study	SJC	09:00 AM - 11:00 AM	T		Clough, S
45452: 3 hours Genomic of Plantmicrobe Intera						

**598 *Seminar* Credit: 1 hours.**

Current research in crops, genetic engineering, plant protection and other topics relevant to Crop Sciences. May be repeated to a maximum of 14 hours if topics vary. Students enrolling in discussion sections receive S/U grading. Students enrolling in lecture-discussion sections receive letter grading. Prerequisite: Graduate standing.

CRN	Type	Section	Time	Days	Location	Instructor
31632	discussion-recitation	C1	12:00 PM - 12:50 PM	R	room W109 Turner Hall	Below, F; Chee-Sanford, J
31636	lecture-discussion	C2	12:00 PM - 12:50 PM	R	room W109 Turner Hall	Below, F; Chee-Sanford, J
31638	discussion-recitation	G1	12:00 PM - 12:50 PM	W	room W109 Turner Hall	Rochefford, T; Jacobs, T
31639	lecture-discussion	G2	12:00 PM - 12:50 PM	W	room W109 Turner Hall	Rochefford, T; Jacobs, T

31642	discussion- recitation	P1	12:00 PM - 12:50 PM	R	room W109 Turner Hall	Below, F; Chee-Sanford, J
31645	lecture- discussion	P2	12:00 PM - 12:50 PM	R	room W109 Turner Hall	Below, F; Chee-Sanford, J

**599 *Thesis Research*** Credit: 0 to 16 hours.

Individual research under supervision of faculty. Required of all students working toward the Master of Sciences (thesis option) or Doctor of Philosophy in Crop Sciences. Approved for S/U grading only. May be repeated to a maximum of 16 hours if topics vary.

CRN	Type	Section	Time	Days	Location	Instructor
10569	independent study		ARRANGED			
10569: Instructor Approval Required						