

New Student Orientation Workbook

College of Agricultural Sciences and Natural Resources

University of Tennessee



2007-2008 Academic Year

All about —

Working with your advisor

Developing a schedule

Advise on success from current students

University resources

Contact information

CASNR majors and concentrations

CASNR minors

New Student Orientation Workbook

Basic Student Information:

Student name: _____

UT email address: _____

Intended major (and
concentration if known): _____

Department of intended major: _____

Academic advisor _____

Building & office room no. _____

Email: _____

Phone: _____

Important Fall Semester 2007 Deadlines

Confirmation of Attendance: You may confirm attendance immediately after registering for fall semester.

Confirmation/Fee Payment Deadline: August 14, 2007

By mail: Make sure you allow enough time for the payment to be received in the Office of the Bursar (211 Student Services Building, Knoxville TN 37996-0225) and processed by 4:30 P.M. on August 14, 2007

In person: August 14, 2007 by 4:30 P.M. in the Office of the Bursar (211 Student Services Building or 128 University Center)

On-line: August 14, 2007 by 11:00 P.M., credit card only

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THE ACADEMIC ADVISOR AND YOU

The advisor — student relationship is very important. As an incoming student, you and your advisor don't know anything about each other — think of it as a blank page. By the time you are a senior, the page should be full. In other words, you will both know each other very well. Realize that a college academic advisor is very different from a high school guidance counselor. The advisor will learn about your interests and your ideas for your future. It is important that you openly and willingly discuss your ideas with your advisor.

During New Student Orientation, you will have your first advising session. For first year students, it will occur on the afternoon of the second day of orientation; for transfer students, it is the afternoon of the one-day session. During this time, make sure you bring to the advisor's attention

- any Advanced Placement exams you may have taken,
- any dual-enrollment credit you may have,
- any transfer credits you may have, and/or
- any signed and approved articulation agreement (this applies only to transfer students).

The Office of the Dean will run academic histories for the advisors; however, they will not include any information about AP credit because scores are not reported to the University of Tennessee until the middle of July. Dual-enrollment and transfer credits, if already received by the University of Tennessee by the time of your orientation session, will appear on your academic history.

The advisor will review the requirements of the major and help you develop your schedule. It is important that you discuss any special circumstances, such as whether you plan on working during the academic year, whether you are a student athlete, or have registered with the Office of Disability Services due to a self-reported, documented learning, physical or other disability. If you have a documented disability of any sort, it is important that you contact the Office of Disability Services in order for them to assist in providing appropriate and reasonable accommodations, if needed.

Your advisor will become your best resource while studying in the College of Agricultural Sciences and Natural Resources. The stronger the working relationship you have with your advisor, the better he or she can help guide you studies. You will discover you have many options that include internships, coops, international study abroad, national student exchange options, honors programs, independent study, and competition team participation. All of these activities may influence when you take specific courses and how you chart your studies.

The advisor will know how you performed in courses, what activities you were involved in, what internships you completed, and what other experiences you had while in college. The advisor can be your advocate and ally. However, for the advisor to help you, you need to meet with the advisor and be open and honest about your goals. Remember, you are the one here to learn. Let your advisor be your guide to the many choices you will have along the way through your education, realizing that the final decision belongs to you. There are many opportunities available to you at the University of Tennessee and you should partake in the experience.

Prior to pre-registration, all students who have earned fewer than 30 hours at UT Knoxville or are on Academic Review are required to meet with an advisor during each main term of the academic year (i.e., during fall and spring). You are encouraged to consult with your advisor at any point during a term or academic year. Prior to the advising session for the next term, you should review carefully the requirements of the curriculum and select appropriate courses to continue progress towards earning a degree. Your advisor assists in selecting subjects to ensure a well-balanced education and interprets university and college policies and requirements. **However, you, not the advisor, bears the ultimate responsibility for selecting courses, meeting course prerequisites, and adhering to policies and procedures.**

TIPS ON DEVELOPING A SEMESTER SCHEDULE

Be smart in section selection!

Prior to your advising session, it will be worth the time to view the CPO Quick Tour before entering the system. From the CPO home page – <https://cpo.utk.edu/CPOWeb/>, click on *CPO Quick Tour* in the left-hand navigation bar and scroll through the PowerPoint display to learn about CPO.

Check your major's showcase (see pages 28 to 59 for the various showcases) for courses that are critical to your major and need to be taken during the first year (i.e., Engineering Fundamentals 105 Computer Methods in Engineering Problem Solving, Mathematics 141 Calculus I). Add these courses first to your schedule. Your advisor will help you identify these during the advising session.

Review the timetable for required courses that offer only one section each semester (i.e. ANR 100 Orientation to Studies in Agriculture and Natural Resources). Add these courses first to your schedule.

Check the timetable for other courses to be taken during the first year that offer multiple sections (i.e., English 101 English Composition). Begin to fit these courses into the schedule.

Make sure you include one orientation or introductory course offered by CASNR (see list on page 7). You are also encouraged to enroll in one of the more than 70 sections of First Year Studies 129 sections. These are seminar-style courses with small enrollments taught by senior faculty members. You should be able to find one that fits your class schedule.

From recent review of student performance, we learned it is best not to take biology, math, and chemistry all in the same semester. What appears to work best, that is to say, students have a greater chance of passing when they take

- in the fall semester of the freshman year, the first semester of biology (Biology 101, Biology 111, or Biology 130) and the first semester of math
- in the spring semester of the freshman year, the first semester of chemistry (Chemistry 100 or Chemistry 120) and the second semester of math
- in the fall semester of the sophomore year, the second semester of biology (Biology 140; note that Biology 102 and 112 are not offered for the fall semester) and the second semester of chemistry (Chemistry 110 or Chemistry 130)

If confused, use the Schedule Builder option available in College Park Online. When using the Schedule Builder, list the courses in order of priority – the first course listed should be the most critical course you need, and so on. The Schedule Builder will add courses in the order you list them in the table.

You are required to complete the UT General Education Program. Courses that meet the requirements are noted by an asterisk in each of the showcases that appear in this workbook. For full information and a complete list of courses that satisfy the requirements, see pages 17 through 21 of the 2007-2008 Undergraduate Catalog or go to the online version posted at <http://diglib.lib.utk.edu/dlc/catalog/u2007.htm> . Depending upon the major, some of the requirements need to be satisfied by taking specific courses (i.e., a major may require specific math courses to satisfy Quantitative Reasoning) or may allow the student to select courses of their choice from the approved list (i.e., any of the approved Arts and Humanities courses may be selected).

The advisor will review your mathematics placement scores to help select the appropriate math course. Your math skills will affect your success in chemistry as well. More detailed information about math placement scores and selecting math courses is on page 8.

With some courses, you may have a lecture, lab and discussion times in your schedule. With others, there may only be a lecture time. Make sure all appear on your schedule.

When there are multiple sections for a single course, do not select the first section listed. These tend to close before sections that appear lower in the list. Why? Human nature is to pick the first section in the list. To ensure getting the course you need, start at the bottom of the list.

Check the building in which the different courses are located. While the University provides good bus service, it is difficult to get from "The Hill" to the Ag Campus in the 15 minutes scheduled between courses. Sometimes it is unavoidable; however, try to keep distances between buildings in mind when selecting course sections.

Early morning sections will remain open longer through the registration period than mid-morning or early afternoon sections.

As sections fill, you may not be able to schedule your first or even second choice in course sections. Be prepared with alternatives.

Whether or not you enroll in courses for which you sat for the Advanced Placement Exam is your decision. Some students have a good "feel" for how well they did; some do not. If you do not feel confident that you will earn credit, go ahead and schedule courses for which you have taken Advanced Placement Exams. Scores are not received by UT until mid-July. We do not know if you will receive credit for courses at the time, you are being advised. We recommend that you schedule these courses now; then check with your advisor again in early August to determine if you earned any credit based on Advanced Placement Exams. You can adjust your schedule in August after speaking with your advisor.

When adding a course, make sure you actually make the selection by clicking on the button and then click submit.

When dropping a course, make sure you actually make the selection by clicking on the button and then click submit.

Make sure you print out your schedule at the end of the day's advising session. If you drop or add a course after today, make sure you print the revised schedule. Keep the printouts in case there is ever a question. It is your responsibility to know what your class schedule is.

When done, click on "Exit System" in left-hand navigation menu on the page. Before logging off you will be directed to complete a New Student Orientation Evaluation. Please complete this evaluation.

Introductory and Orientation Courses Offered by CASNR Fall Semester 2007

Advisors will help you select the appropriate orientation or entry-level course for the major. If you are undecided or the course does not fit you schedule, enroll in ANR 100 or one of the First Years Studies 100 sections.

Agricultural Economics 110 Opportunities in Agricultural Economics and Business

001	LEC	1	3:35PM - 4:25PM	W	MH 212B	Dr. W. Park
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Agricultural Economics 212 The Agribusiness Firm

001	LEC	3	9:05AM - 9:55AM	MWF	MH 226	Dr. W. Park
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Agriculture and Natural Resources 100 Orientation to Agriculture and Natural Resources

001	LEC	1	3:35PM - 4:25PM	W	MH 226	Ms. T. Cooper
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Animal Science 160 Introduction to Animal Science

001	LEC	3	12:20PM - 2:15PM	MWF	BAS 212	Dr. M.O. Smith
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Biosystems Engineering 201 Career Opportunities

001	LEC	1	3:35PM - 4:25PM	W	BEES 268	Dr. D. Yoder
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Entomology & Plant Pathology 201 Impact of Insects and Plant Diseases on Society (meets UT General Education Requirement in Natural Sciences, non-lab course)

001	LEC	3	9:40AM - 10:55AM	TR	PBB 160	Dr. P. Lambdin
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Environmental and Soil Sciences 120 Soils and Civilizations (meets UT General Education Requirement in Cultures and Civilizations)

001	LEC	3	3:35PM - 4:25PM	MWF	PS 125	Dr. N. Eash
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Food Science & Technology 101 Science of Foods

001	LEC	3	10:10AM - 11:00AM	MWF	JHB 244	Dr. C. Costello
	LAB		10:10AM - 12:05PM	T	JHB 18	Dr. C. Costello
002	LEC	3	10:10AM - 11:00AM	MWF	JHB 244	Dr. C. Costello
	LAB		8:00AM - 9:55AM	T	JHB 18	Dr. C. Costello

Forestry 100 Forests and Forestry in American Society

001	LEC	3	8:10AM - 9:25AM	T	PS 123	Dr. S. Schlarbaum
	LEC	3	2:30PM - 3:20PM	M	PS 123	Dr. S. Schlarbaum

Plant Sciences 115 Plants for Health, Aesthetics, and Recreation

001	LEC	3	11:10AM - 12:25PM	TR	PBB 160	Mr. J. Newburn
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Plant Sciences 210 Horticulture Principles and Practices

001	LEC	3	11:15AM - 12:05PM	MWF	PS 125	Dr. D. Kopsell
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Wildlife and Fisheries Science 101 Current Topics in Wildlife Health

001	LEC	1	9:40AM - 10:55AM	T	PS 123	Dr. G. Hinkling
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First Year Studies 101 First Year Studies

LEC	1	57 sections at various times and days		Various locations and instructors		
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MATH PLACEMENT TEST RESULTS INTERPRETATION

During each freshman student orientation, students take a math placement exam offered by the Department of Mathematics. This test is designed to assess your math skills to provide you and your advisor guidance in selecting the appropriate level math course. The goal is to start you in a course for which you have the proper background. Additionally, the Department of Chemistry has examined student performance in chemistry courses and compared it to their math placement score to develop some benchmarks for performance in the freshman level chemistry courses.

Any student with a high school GPA of at least 3.75 or an ACT score of at least 28 (SAT 1260) may increase his or her placement level by 1 unit (e.g., move from placement level 5 to 6).

*Mathematics 117 (Honors) may be taken instead of Mathematics 113 by students with an ACT score of at least 28 or with consent of the instructor.

Mathematics 109 Algebra Workshop: Students who qualify for 119, 130, or 141 must take Mathematics 109 concurrently with their course if so indicated in their placement level. For example, any student at level 2 must concurrently take 109 when enrolling in 119, while students at level 3 may choose whether or not to take 109 concurrently with 119. This workshop may be taken for credit up to three times. Extra points in Math 119, 130, and 141 may be awarded to students who also take Math 109.

Neither Math 119 nor 130 will fulfill the UT General Education Requirement as a Quantitative Reasoning Course. The sole purpose of these courses is to prepare students to take QR courses such as 123-125 or 141-142. *Petitions to have these courses count for QR will be denied.*

Ignoring placement results may be hazardous to your GPA. Consequences of ignoring placement results may include:

- Failure of course
- Severe damage to GPA
- Loss of scholarship
- Repeating math courses
- Delay of graduation
- Decrease in study time for other courses
- Decrease in confidence in math ability

Placement Level	1	2	3	4	5	6	7	8
Major requires Math 141-142 or 151-152	Start in Math 100 Sequence: 100, 119, 130, 141 or 151	Start in Math 119 Level 2 also needs 109 Sequence: 119, 130, 141 or 151	Start in Math 119 Level 2 also needs 109 Sequence: 119, 130, 141 or 151	Start in Math 130 Level 4 also needs 109 Sequence: 130, 141 or 151	Math 141 or 151 Level 6 also needs 109 if taking 141	Math 141 or 151 Level 6 also needs 109 if taking 141	Math 141 or 151 Level 6 also needs 109 if taking 141	Math 141 or 151 Level 6 also needs 109 if taking 141
Major requires Math 123 and/or 125*	Start in Math 100 Sequence: 100, 119, 123 or 125	Start in Math 119 Level 2 also needs 109 Sequence: 119, 123 or 125	Start in Math 119 Level 2 also needs 109 Sequence: 119, 123 or 125	Math 123 or 125 (can be taken in either order)	Math 123 or 125 (can be taken in either order)	Math 123 or 125 (can be taken in either order)	Math 123 or 125 (can be taken in either order)	Math 123 or 125 (can be taken in either order) Ask student if Math 141 may be better for future plans
Major requires or recommends Math 115	Math 115	Math 115	Math 115	Math 115	Math 115	Math 115	Math 115	Math 115
Major requires Math 113	Math 113	Math 113	Math 113	Math 113	Math 113	Math 113	Math 113	Math 113
Major does not require any specific math course	Math 113 or 115 (can be taken in either order) If composite ACT \geq 28, suggest 117	Math 113 or 115 (can be taken in either order) If composite ACT \geq 28, suggest 117	Math 113 or 115 (can be taken in either order) If composite ACT \geq 28, suggest 117	Math 113 or 115 (can be taken in either order) If composite ACT \geq 28, suggest 117	Math 113 or 115 (can be taken in either order) If composite ACT \geq 28, suggest 117	Math 113 or 115 (can be taken in either order) If composite ACT \geq 28, suggest 117	Math 113 or 115 (can be taken in either order) If composite ACT \geq 28, suggest 117	Math 113 or 115 (can be taken in either order) If composite ACT \geq 28, suggest 117
Student is completely undecided	Take electives to determine interests. Delay math until major is chosen.	Take electives to determine interests. Delay math until major is chosen.	Take electives to determine interests. Delay math until major is chosen.	Math 125	Math 125	Math 125	Math 125	Math 125 or 141

* Math 125 satisfies the prerequisite for Statistics 201

** If composite ACT < 28, will need permission of the Math Department to enroll in Math 117

Math 113 does **not** prepare students for Math 119. Math 119 and Math 130 are **not** approved General Education, Quantitative Reasoning (QR) courses.

Advice for Chemistry 120

If your ACT math score is less than 22, you should not register for Chemistry 120. You are advised to take the appropriate mathematics course (Mathematics 119 or 130). The Department of Chemistry has determined that successful completion of Math 119 or Math 130 with a grade of C or better will improve your probability of success in Chemistry 120. If your ACT math score is less than 22, but you scored 4 or better on the UT math placement test or if your ACT Natural Science score is 22 or higher, you may register for Chemistry 120.

In summary, you need to meet one of the following requirements before registering for Chemistry 120:

- ACT math score of 22 or higher
- SAT math score of 530 or higher
- Successful completion of Mathematics 119 or 130 or a higher level math course
- ACT natural science score of 22 or higher
- UT math placement score of 4 or higher

CLASS SCHEDULE WORKSHEET

M-W-F times	T-R times	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 — 8:50						
	8:10 — 9:25					
9:05 — 9:55						
	9:40 — 10:55					
10:10 — 11:00						
	11:10 — 12:25					
11:15 — 12:05						
	12:40 — 1:55					
12:20 — 1:10						
	2:10 — 3:25					
1:25 — 2:15						
	3:40 — 4:55					
2:30 — 3:20						
	5:05 — 6:20					
3:35 — 4:25						
	6:30 — 7:45					
4:40 — 5:30						
	7:55 — 9:10					
5:45 — 6:35						
	9:20 — 10:35					
6:45 — 7:35						
7:45 — 8:35						
8:45 — 9:35						
9:45 — 10:35						

Shaded class times are P.M. Additional worksheets are provided in the back of this workbook.

SAMPLE CLASS SCHEDULE

Course credit hours are given in parentheses. You should have from 15 to 18 credit hours per semester.

M-W-F times	T-R times	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 — 8:50						
9:05 — 9:55	8:10 — 9:25	MATH 141 lecture (4)		MATH 141 lecture (4)	MATH 141 lecture (4); starts at 8:00	MATH 141 lecture (4)
10:10 — 11:00	9:40 — 10:55	HISTORY 255 lecture (3)	HISTORY 255 discussion (3)	HISTORY 255 lecture (3)		
11:15 — 12:05	11:10 — 12:25		BIOLOGY 130 lecture (4)		BIOLOGY 130 lecture (4)	ANTRHO 130 lecture/disc (3)
12:20 — 1:10	12:40—1:55					
1:25 — 2:15		ENGLISH 101 (3)		ENGLISH 101 (3)		ENGLISH 101 (3)
2:30 — 3:20	2:10 — 3:25	ANTHRO 130 lecture (3)		ANTHRO 130 lecture (3)	BIOLOGY 130 lab 2:30—5:30 (4) NOTE: The lab starts at 2:30 so it falls into the standard class session that starts at 2:10 P.M.	
3:35 — 4:25	3:40 —4:55			ANR100 (1)		
4:40 — 5:30	5:05 — 6:20					
5:45 — 6:35						
6:45 — 7:35	6:30 —7:45					
7:45 — 8:35	7:55 — 9:10					
8:45 — 9:35						
9:45 — 10:35	9:20 — 10:35					

Building Codes

Building codes used in the registration system to denote classroom location. The room is given after the building code. Buildings in bold face text are located on the Ag Campus.

Code	Building	Code	Building
A	Ayres Hall	HPR	Health, Physical Education & Recreation
AA	Art & Architecture	H-S	Hearing & Speech Center
AC	Aconda Court	HSS	Humanities and Social Sciences
AHT	Andy Holt Tower	IH	International House
AMB	Alumni Memorial Bldg.	JHB	Jessie Harris Bldg.
AP	Austin Peay	LAW	Taylor Law Center
AQU	Student Aquatic Center	LIB	Hodges Library (Main)
BAS	Brehm Animal Science Bldg.	M	Music Building
BEES	Biosystems Engineering. & Environmental Science	MC	McCord Hall
BCC	Black Cultural Center	MEL	Melrose Hall
BGB	Burchfiel Geography	MH	Morgan Hall
BU	Buehler/Dabney	MM	McClung Museum
C	Claxton Complex	NBA	Neyland Biology Annex
CA	Claxton Addition	NTS	Neyland Thompson Sports Center
CBT	Clarence Brown Theatre	PBB	Plant Biotechnology Bldg
CER	Ceramics Addition	PER	Perkins Hall
CERX	Ceramics Annex	PHY	Nielsen Physics Bldg
CIE	Center for International Education	PS	Ellington Plant Sciences
CN	Nursing Building	PSQ	Pasqua Nuclear Engineering
COM	Communications	SAC	Stokely Athletics Center
DES	Design House	SE	Science & Engineering
DO	Dougherty Engineering	SCC	Student Counseling Center
DUH	Dunford Hall	SMC	Stokely Management Center
EA	Engineering Annex	SSB	Student Services Bldg.
ELLB	Environ. & Landscape Lab Bldg.	SSH	South Stadium Hall
EPS	Earth & Planetary Science	TC	Temple Court
ESH	East Stadium Hall	TOW	McClung Tower
EST	Estabrook Hall	UC	University Center
FH	Ferris Hall	UH	University Honors
FSP	Food Safety and Processing	UTMH	UT Medical Hospital
FT	McLeod Food Technology	VTH	Veterinary Teaching Hospital
G	Glocker	WAB	White Avenue Bldg.
GH	Greenhouses	WBA	White Avenue Biology
H	Hesler	WLS	Walters Life Sciences
HH	Henson Hall		
HOS	Hoskins Library		

ADVICE FROM STUDENTS ON COLLEGE SUCCESS:

When students were asked, "What single piece of advice would you give an entering new student at the University of Tennessee?" this is what they said –

Become part of something –

Become a part of something, whether it is a club, group, or just involved with their college. Don't fade away into the mass of students at UT. I believe you will have a more successful and enjoyable college experience if you do.

Get involved here by attending at least informational meetings for any and every club/organization they might be interested in, pick a couple they think they will really enjoy, and focus their efforts on really getting involved and becoming a big part of those which they choose.

I would tell students to become involved. Students that participate in clubs and groups find the university to be much smaller. Clubs are a great way to meet people and have a good time. Clubs also provide leadership and citizenship opportunities that help to make people well rounded.

Become involved around campus. This is your key to making the most of your college experience. No matter what organization you choose to become affiliated with, you will gain friendships and valuable leadership experiences that will last a lifetime. There are certain things that classroom learning simply cannot provide, and student organizations are a great way to get the extra skills you need to make it in the real world.

Reach outside their comfort zone –

All college students should try to reach outside their boundaries and comfort zones by taking part of new opportunities. By doing this, not only will they become a well-rounded person, but they will also have the opportunity to meet new friends who they may have not encountered otherwise.

Learn how to learn –

College is only a place where you learn how to learn. You learn how to find information on your own. You learn to juggle a job and schoolwork. You learn to be self-sufficient, so when you enter the "real world," you will be able to function on your own. Finally, you learn that there is always going to be good days and bad days, but you learn to enjoy it, because life is not fun if you do not enjoy it.

Take advantage of all the resources available to you –

My advice to an entering new student would be to get familiar with the campus and your professors. Arrive early to class and introduce yourself to your professors on the first day; they are there to help you succeed. Familiarize yourself with the different areas of the University and learn as much as you can.

The key to doing good in a hard class is go to it every day and take good notes. If you can listen to the professor and write it down then you will have no problem. Every incoming freshman needs to realize, yes, it is a lot different in college, but if you are lucky enough to be a CASNR major then your professors do care about you and your grades.

Use his or her resources to the fullest. This includes advisors, upperclassmen, and professors. Also, be aware of the major they are choosing and the path they have to take. Keep up with classes that have been taken and those that have to be taken in the future. Map out a plan of action for their whole college career. Keep up with academic history and transcripts as well as VolExpress statements. Also, be aware of deadlines. I would advise them to think thoroughly about their interests before choosing a major and make sure they are aware of the rewarding options that the College of Agricultural Science and Natural Resources has to offer.

Learn how to manage your time —

The one piece of advice I have learned is to manage one's time. With proper time management, students will be able to achieve great success in grades, yet still have plenty of time for other activities. I have found that a semester calendar is the best way to manage time because it allows students to look weeks ahead and see what is coming up. This way, students will not be pressed for time due to procrastination and will find their college experience to be much more relaxing and successful.

Personally, I did not think it was possible to maintain good grades and be involved in clubs, but I found that once I learned how to manage my time it was surprisingly easy.

GENERAL INFORMATION

Requirements to earn a degree

All students must meet the University of Tennessee General Education Requirements as outlined in the 2007-2008 Undergraduate Catalog and all degree requirements of the major. Students are responsible for understanding the degree requirements. Students are expected to make satisfactory progress towards their degree.

Besides checking the showcase (the year-by-year listing of requirements as they appear in the catalog), there is also DARS (Degree Audit Report System). Your advisor should show you how to run a DARS report; however, if she or he doesn't, contact Ms. Theresa Cooper in the Office of the Dean.

Students must maintain an UT cumulative grade point average of a 2.00 and maintain a 2.00 grade point average in all courses in the major.

Students in the CASNR cannot graduate with a grade of F in any course in the major/concentration (i.e., wildlife and fisheries science students must pass all WFS courses). Students must repeat courses in the major/concentration and earn a passing grade prior to the awarding of the degree.

Scholarships

To retain CASNR scholarships, students must remain in good academic standing, be enrolled in a major offered by CASNR, and complete a scholarship application each year. Scholarship applications are due by February 1 each academic year.

Classroom behavior and ethics

Students are expected to conduct themselves in accordance with the UT Honors Statement

An essential feature of The University of Tennessee is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. As a student of the University, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.

When you signed your application for admissions to UT, you acknowledged adherence to the above statement. Additionally, you are expected to show respect to all faculty, staff, students, and guests of the University. Demonstrating respect includes being tolerant of others regardless of their race, gender, color, religion, national origin, age, or disability.

Respectful classroom behavior includes:

1. Turning off cell phones and other electronic devices while attending class and during special seminars and events.
2. Not emailing or text messaging while in class.
3. Not reading the school newspaper, *The Daily Beacon*, or other non-class related materials in class.
4. Being prepared for class, which means having read assigned materials and bringing any needed materials to class, as told by the instructor.
5. Meeting course deadlines for turning in any assignments (i.e., lab reports, term papers, book reviews).

6. Being prepared to take all quizzes, exams, and in-class exercises as announced on the syllabus or even "pop" or "surprise" quizzes, exams or exercises.
7. Completing work per the guidelines established for the course for all independent and group work. If the instructor specifies "independent work," it must be done independently.
8. Properly citing works used in writing assignments and following citation guidelines as established by the instructor. If you don't know proper citation format, ask the instructor.
9. Notifying faculty of any potential conflicts/absences at least two weeks in advance.

CASNR Office of the Dean Personnel

Office of the Dean
College of Agricultural Sciences and Natural Resources
126 Morgan Hall
Knoxville TN 37996-4500
Phone: 865-974-7303
Fax: 865-974-9329
Email: casnr@utk.edu
Web: <http://casnr.utk.edu/>

Dr. Caula Beyl, Dean

Provides leadership for the academic programs, works with statewide constituencies and stakeholders including alumni and various commodity and industry organizations, is a member of the Vice President for Agriculture's Cabinet, represents CASNR on regional and national committees, and is an advocate for the CASNR with University administration
Email: cbeyl@tennessee.edu

Dr. Mary Lewnes Albrecht, Associate Dean for Academic Programs

Provides leadership for the undergraduate and graduate teaching programs, including student and faculty development, representing the College and UT Institute of Agriculture on university-wide committees, and supports the Dean in her efforts to provide an outstanding educational experience.
Email: mlalbrecht@utk.edu

Ms. Angela Berry, Administrative Specialist II

Coordinates activities among departmental student records secretaries and room schedulers, handles student records and liaison with the University Registrar; processes student petitions and data entry into DARS, coordinates orientation, room scheduling and college commencement, and provides administrative support related to human resources and CASNR building use inventory.
Email: aberry1@utk.edu

Ms. Rita Brymer, Administrative Specialist I

Provides administrative support for the College Honors Program, handles student records and data entry into DARS, assists with recruitment/retention programs, assists with special college publications, review of college Web pages, Career Fair and College/University Career Services and college commencement.
Email: rbrymer@utk.edu

Ms. Theresa Cooper, Program Coordinator for Retention

Provides support for advisors and students on academic review, liaison with the UT Undergraduate Advising Council and the Student Success Center; Minorities in Agriculture,

Natural Resources, and Related Sciences chapter advisor; assists with recruitment of students; liaison with FFA.

Email: theressacooper@utk.edu

Ms. Emily Gray, Lecturer and Director of CASNR Career Services

Teaches ANR 290 Computer Applications in Agriculture and Natural Resources; liaison with University Career Services, plans and conducts CASNR Career Fair, coordinates on-campus interviews, provides career advising to students.

Email: ecgray@tennessee.edu

Ms. Leann McElhaney, Accounting Specialist II

Provides administrative support for the College Scholarship Committee; provides management for college restricted and unrestricted accounts; liaison with University Office of Financial Aid and Scholarships, provides oversight for CASNR inventory, and assists with special CASNR events.

Email: jmcelhan@utk.edu

Ms. Benita Murphree, Administrative Support Assistant III

Provides support for the recruitment program and College Ambassadors, serves as primary receptionist, handles travel authorizations and payment for college accounts, and assists with preparation of curriculum documents.

Email: bmurphre@utk.edu

Vacant, Program Coordinator for Recruitment

Plans and conducts the student recruitment program, works with high school counselors and county Extension personnel, advises College Ambassador Program, liaison with UT Office of Admissions; liaison with 4-H Youth Development

UNIVERSITY RESOURCES

The University of Tennessee and the College of Agricultural Sciences and Natural Resources provides numerous services to help students succeed in their education and reach their goals. Take advantage of these –

Computers:

CASNR does not require that students arrive to campus with a personal computer to minimum specifications. Faculty members do have an expectation that students have minimum skills in word-processing and spreadsheet applications. To assist students in gaining these skills, Agriculture and Natural Resources 290 Computer Applications is offered both fall and spring semesters.

Each student pays a Technology Fee. This fee supports the CASNR Computer Lab in Biosystems Engineering and Environmental Science Building, as well as public computing labs in the Hodges Library, Pendergrass Agriculture—Veterinary Medicine Library (located in the College of Veterinary Medicine and opened to all students), and various other locations on campus. Additionally, all dormitory rooms have Internet access; however, with Internet access, comes responsible use of the Internet. Illegal downloading of music and video files will result in penalties against the students by the Recording Industry Association of America (RIAA).

The UT campus is wireless with access in all buildings and outdoor areas, including the Joe Johnson-John Ward Pedestrian Mall and the UT Gardens. Students bringing laptops need to review information at <http://oit.utk.edu/helpdesk/section/Wireless/> to learn about accessing the wireless network.

All computers used on campus need to run anti-virus software. As students at UT, you may use McAfee Anti-Virus, free of charge. For more information and the free download, go to <http://antivirus.utk.edu/>.

Student Computer Support Services are available. For more information, check http://oit.utk.edu/helpdesk/section/Student_Computer_Support/ (note there is an underscore between the words "Student" and "Computer" and the words "Computer" and "Support").

UT Email:

Each student is provided a UT email address. This is an official form of communication with students. You are expected to activate your account and check your email for important information from university administrators and faculty. To activate your email go to <http://oit.utk.edu/email.php> to learn more about UT email, passwords, related policies, and FAQs.

CASNR Student Services:

Ms. Emily Gray
Director, CASNR Student Services
118 Morgan Hall
Phone: 865-974-7303
Email: ecgray@tennessee.edu.

Ms. Theresa Cooper
Coordinator, Retention
201 Morgan Hall
Phone: 865-974-7303
Email: theressacooper@utk.edu

Ms. Gray is available to help students with resume and letters of application preparation, internship and career searches, and other matters related to careers.

Ms. Cooper is available to discuss concerns that students may have, such as, sense of being lost, not understanding the "System", finding trouble connecting to the University and College, and questions about who to see for specific needs. She also works with students on academic review to develop a plan to return to good standing.

Office of Disability Services:

2227 Dunford Hall,
Knoxville, TN 37996-4020
Phone: 865-974-6087 (v/tty)

Fax: 865-974-9552
E-mail: ods@utk.edu
Web: <http://ods.utk.edu/>

ODS is there to help students with permanent or temporary disabilities, whether physical, mental, emotional, or learning. They are there to help you work with the faculty to provide reasonable accommodations for your disability.

Student Success Center:

1817 Melrose Avenue
Knoxville, TN 37996
Phone: 865-946-HELP [4357]
Web: <http://studentsuccess.tennessee.edu/index.htm>

Fax: 865-974-2944
E-mail: studentsuccess@utk.edu

The Student Success Center works with faculty and students in various programs from Living Communities in the dormitories to academic review workshops to help students gain the skills needed to excel in the classroom.

The Writing Center:

212 Humanities and Social Sciences Building and The Commons, 220 Hodges Library
Phone: 865-974-2611
Email: writingcenter@utk.edu
Web: <http://web.utk.edu/~english/writing.php>

The Writing Center provides individualized support in developing writing assignments. Tutors do not proofread or edit work. They do help you brainstorm ideas and better learn how to approach the writing process.

Center for International Education:

1620 Melrose Avenue
Knoxville TN 37996-3531
Phone: 865-974-3177

Fax: 865-974-2985
Email: cie@utk.edu
Web: <http://web.utk.edu/~globe/>

With the advancements in communication technology, the world is rapidly becoming one community. UT and CASNR recognize the importance of learning about cultures other than our own. You are encouraged to seek opportunities to learn more about the world you live in. The CIE provides various services to students including semesters abroad, faculty-led study abroad programs, international service programs, and seminars about world issues. Many CASNR faculty members are involved in providing international opportunities to students.

Counseling Center:

900 Volunteer Boulevard
Knoxville TN 37996
Phone: 865-974-2196
Fax: 865-974-7039

Email: counselingcenter@utk.edu
Web: <https://my.tennessee.edu/pls/portal/docs/PAGE/CC/COUNSELINGCENTERNEW/HTML/index.html>

The Counseling Center is the university's primary facility for personal counseling, psychotherapy, and psychological outreach and consultation services. Their mission is to promote the psychological, educational, and social well-being of the students of The University of Tennessee

and to help prepare them to be productive members of society. The staff members provide a variety of services for students, faculty and staff, including walk-in intake; crisis intervention; individual, couples and group counseling and psychotherapy; psycho-educational workshops, and consultation.

Student Health Service:

1818 Andy Holt Avenue
Knoxville, Tennessee 37996-2800
Phone: 865-974-3135
Fax: 865-974-2000
Web: <http://web.utk.edu/~shs/>

The University Student Health Service is a full-service health center. Students should utilize this service. If necessary, the physicians at the Health Service will refer to practitioners in the Knoxville medical community.

The T Bus System:

Web: <http://www.ridethet.com/>

You pay a Transportation Fee each term. This provides access to the Knox Area Transit bus routes, including the "T" – the campus routes.

You can board the Ag Express at the transfer station located between the University Center and Neyland Stadium. The Ag Express stops at Parking Garage 10 (the large commuter parking garage between Thompson Boling Assembly Center and Arena and Neyland Stadium) then continues on Neyland Drive to the Ag Campus stopping at the corner of Joe Johnson Drive and River Drive near Brehm Animal Science Building.

The East-West T route starts at the Transfer Station and travels the Hill, and crosses campus along Volunteer Blvd, turning at Pat Head Summit Drive stopping at the Student Health Center, turning onto Andy Holt Drive, stopping by the dormitories before crossing the bridge and circling the Ag Campus stopping in front of Brehm Animal Science, behind McLeod Hall, Ellington Plant Sciences Building and returning to the east campus across the bridge. For full route maps and schedule information go to their web site.

GLOSSARY

Academic review : a status that indicates a student is in academic difficulty. Students are placed on academic review when their semester grade point average falls below 2.00 for two consecutive semesters regardless of their cumulative grade point average. Some universities call this status "probation."

Academic review/Pending academic dismissal : a status that indicates a student has a cumulative grade point average below the acceptable minimum of 2.00.

Blackboard : the online course management system used by the University of Tennessee. For more information, see Online@UT below.

Bursar, Office of : the office that is responsible for processing of fees, scholarships, other forms of student add, and maintaining a student's financial account with the university, <http://web.utk.edu/~bursar/>

CASNR, College of Agricultural Sciences and Natural Resources

College : An administrative subunit of a university that has oversight for related academic programs. Colleges may have various departments. Departments manage specific academic majors. Faculty members report to the department head.

Concentration : a focused area of study within a major. In Animal Science, Environmental and Soil Sciences, Food Science and Technology, Forestry, Plant Sciences, and Wildlife and Fisheries Science, a student must select a concentration. In Agricultural Economics and Business, Agricultural Sciences, and Biosystems Engineering, a student does not have to select a concentration.

Corequisite : a course that must be taken either before or with another course.

CPO, Circle Park Online : the web site where a student completes online registration, drop and add of courses through stated deadlines, updates personal information (i.e., address, phone numbers), checks grades awarded each term, completes semester enrollment confirmation and fee payment, <https://cpo.utk.edu/CPOWeb/>

Credit hours : each course carries credit hours which approximately represents the amount of time a student spends in a course. Generally, a course is assigned one credit hour for each hour of lecture or discussion, and one credit hour for every two hours of laboratory or studio. Therefore, a 3-credit-hour English course will meet for three 50-minute discussion sessions or two 75-minute discussion sessions each week; a 4-credit-hour laboratory course typically will have two 50-minute of lection and one 2-hour or 3-hour laboratory session each week. However, realize this may vary somewhat from discipline to discipline.

Cumulative GPA : grade point average as calculated for entire enrollment at UT

Curriculum : The program of study followed by students to earn a degree. Curriculum has prescribed university-wide general education requirements, college-level requirements, department-level requirements that support the major, and major requirements (courses in the specific discipline, i.e., animal science courses in the animal science major). These are all given in the showcases provided on pages 28 to 59.

DARS, degree audit report system : An web-based report that you can run to monitor your progress towards meeting degree requirements, <http://registrar.utk.edu/dars/index.shtml> . You will

need your UT student ID number and system password. Once logged in, you will select the academic major and catalog year to run the report.

Department : A unit within a college. Faculty members are part of the department. Each department will offer an academic major organized within a curriculum. In CASNR, there are seven departments and nine academic majors.

Good Academic Standing : a status that indicates you have a cumulative grade point average of 2.00 and a semester grade point average of 2.00. One requirement for graduation is a minimum of 2.00 cumulative grade point average.

Grades : UT utilizes the following grade notations that impact the grade point average: A, B+, B, C+, C, D, F, and WF (withdrawn failing, equivalent to an F and earns no quality points; awarded when a course is dropped between the 42nd and the 84th day of the semester). The following grade notations do not impact the grade point average: NC (no credit, awarded for certain courses that offer the grading option of A, B, C, or NC; the NC is awarded for work equivalent to that which would normally earn the grade of D or F), S (satisfactory, awarded for certain courses that offer the S/NC grading option), W or WP (withdrawn or withdrawn passing; W is awarded to courses dropped between the 10th and 42nd days of the semester; WP is awarded to courses dropped between the 42nd and the 84th days of the semester while the student was passing). The grade of I (incomplete) is used under special circumstances that are described in the 2007-2008 undergraduate catalog on page 43.

GPA, grade point average : calculated by multiplying the credit hour value for each course by the quality point value of the grade awarded for the course, then adding the quality points for all courses and dividing this number by the total number of credit hours. Quality points are assigned to grades are A = 4.0, B+ = 3.5, B = 3, C+ = 2.5, C = 2; D = 1.0, and F = 0. Sample grade point average calculation:

Course	Credits	Grade	Credits X Grade	Quality points
Math 141	4	B	4 X 3 =	12
Biology 101	4	B+	4 X 3.5 =	14
English 101	3	A	3 X 4 =	12
Sociology 120	3	B	3 X 3 =	9
ANR 100	1	A	1 X 4 =	4
FYS 129	1	A	1 X 4 =	4
Total	16			55
			Grade point average	3.44

For more information about grades, GPA calculation and ways to determine how well you need to perform to raise your grade point average, see the Grade Point Average Calculator at the Office of the Registrar website, <http://registrar.tennessee.edu/records/grades.shtml>

Major : a student's principal field of study that commonly consists of approximately 25% of the total credit hours needed to earn a degree.

Online@UT : the web-based, online course management system. Individual instructors may request a site for their course and post course materials, grades, use online testing and other

features to aid in the instruction of the course, <http://online.utk.edu/> . This system is also referred to as Blackboard, the company that developed and provides the software to the university.

Prerequisite : a course that must be taken before another course because it provides foundation information and experiences needed for the second course.

Registrar, Office of : the office that is responsible for has oversight for and maintains student records, which include transcripts, academic history, maintain academic calendar, grade entry, graduation clearance, transfer transcript evaluation, articulation agreements with community colleges, academic review and dismissal processes, <http://registrar.tennessee.edu/>

Showcase : the year-by-year listing of requirements as they appear in the catalog

Term GPA : grade point average as calculated for the fall semester, spring semester, or summer term.

Timetable : the listing each semester's or term's course offerings. Courses will be listed alphabetically by academic disciplines. Within each academic discipline, courses will be listed by number. The timetable will provide information as to when each individual course will be offered: the section (some courses will have multiple sections; you only register for one section), days of the week the course meets, the time of the day the course meets, the room and building where the course meets, and who the instructor is.

T-Mail : the student email system, which uses the Microsoft Outlook client

AREAS OF STUDY AND CONTACT INFORMATION

CASNR offers a broad range of academic majors; many offer concentrations – focused study within specialty areas. If you are interested in continuing your education beyond the Bachelor of Sciences degree, discuss this with your advisor. Many CASNR graduates continue to graduate school from all of the academic majors. Others continue their education in various professional programs, such as veterinary medicine, medicine, dentistry, pharmacy, physical therapy, law, and landscape architecture.

Code	Areas of study Majors & concentrations	Department head	Program coordinator	Secretary	Phone number (865)
027 Agricultural Economics and Business Major (Department of Agricultural Economics)					
		Dr. Dan McLemore		Ms. Melitta Stout	974-7231
A027	Agricultural Equipment Systems Management		Dr. William Park		
051 Agricultural Sciences Major (Interdepartmental Unit)					
		Dr. Dan McLemore		Ms. Julie Goldman	974-7371
A051	Agricultural Education		Dr. Carrie Fritz		
B051	Agricultural Extension Education		Dr. Randol Waters		
	All other students in Agricultural Science		Ms. Theresa Cooper		974-7303
072 Animal Science Major (Department of Animal Science)					
		Dr. Alan Mathew		Ms. Arlene Stewart	974-3123
O072	Production/Business/ Communications		} Dr. Richard Heitmann		
J072	Science/Technology				
K072	Science/Technology – Pre-Veterinary Med				
C072	Pre-Veterinary Medicine 3+1				
110 Biosystems Engineering Major (Department of Biosystems Engineering and Soil Science)					
		Dr. George Grandle		Ms. Margaret Taylor	974-1152
I110	Pre-Professional		Dr. Daniel Yoder		
276 Environmental and Soil Sciences Major (Department of Biosystems Engineering and Soil Science)					
		Dr. George Grandle		Ms. Margaret Taylor	974-1152
C276	Agricultural Systems Technology		} Dr. Joanne Logan		
A276	Environmental Science				
B276	Soil Science				
312 Food Science and Technology Major (Department of Food Science and Technology)					
		Dr. P. Michael Davidson		Ms. Vikki Webb	974-7331
I312	Pre-Professional		} Dr. John Mount		
F312	Science				
G312	Technology/Business				
348 Forestry (Department of Forestry, Wildlife and Fisheries)					
		Dr. Keith Belli		Mrs. Martha Thompson	974-7331
A348	Forest Resources Management		} Dr. Don Hodges		
B 348	Wildland Recreation				

Code	Areas of study Majors & concentrations	Department head	Program coordinator	Secretary	Phone number (865)
746	Plant Sciences Major (Department of Plant Sciences)				
		Dr. G. Neil Rhodes		Ms. Sandra Kitts	974-7324
F746	Landscape Design and Construction	}	Dr. Robert Augé		
G746	Plant Science, Biotechnology and Horticulture				
D746	Public Horticulture				
H746	Turfgrass Science and Management				
990	Undecided	Ms. Theresa Cooper		Ms. Rita Brymer	974-7303
982	Wildlife and Fisheries Science Major (Department of Forestry, Wildlife and Fisheries)				
		Dr. Keith Belli		Mrs. Martha Thompson	974-7126
B982	Wildlife and Fisheries Management	}	Dr. Don Hodges		
A982	Wildlife Health				

ACADEMIC MAJORS AND CONCENTRATIONS

AGRICULTURAL ECONOMICS AND BUSINESS MAJOR

First Year	Hours	Credit
Agricultural Economics 110	1	1
Agriculture and Natural Resources 290	3	3
¹ Biological Science Electives*	8	8
² Cultures and Civilizations Electives*	6	6
English 101*, 102*	6	6
Mathematics 123*, 125*	6	6
Second Year		
Accounting 200	3	3
Agricultural Economics 212	3	3
Animal Science 280 or 381	3	3
Economics 201*	4	4
² Arts and Humanities Elective*	3	3
³ Physical Sciences Electives*	8	8
Environmental and Soil Science 210 or Plant Sciences 335	3-4	3-4
Statistics 201*	3	3
Third Year		
Agricultural Economics 310, 320, 342, 350, 412	13	13
Agricultural and Extension Education 440* or English 360* or Journalism and Electronic Media 201*	3	3
Non-departmental Agricultural Electives	6	6
Psychology 110* or Political Science 102* or Sociology 120*	3	3
Communication Studies 210* or 240*	3	3
Statistics 320 or 365	3	3
Fourth Year		
Agricultural Economics 410	1	1
⁴ Agricultural Economics or Rural Sociology Electives	15	15
Economics 313	3	3
² Arts and Humanities Elective*	3	3
Electives	8-9	8-9
	Total	122

* Meets University General Education Requirement.

¹ Selected from Biology 101 and 102, 111 and 112, or 130 and 140.

² Choose any course from the University General Education list.

³ Selected from Chemistry 100, 110, 120, 130; Geography 131, 132; Geology 101, 102, 103.

⁴ A minimum of 9 credit hours must be taken from the following courses: Agricultural Economics 315, 330, 337, 355, 360, 420, 430, 442, 444, 450, 470. A maximum of 3 credit hours can be used from each of the following courses: Agricultural Economics 356, 492, and 493.

DIRECTED ELECTIVES

Non-departmental Agricultural Electives

Animal Science 280, 381;
Biosystems Engineering Technology 202;
Entomology and Plant Pathology 201, 313, 321;
Environmental and Soil Sciences 210;
Food Science and Technology 150;
Forestry, Wildlife and Fisheries 211, 250;
Plant Sciences 335.

Agricultural Economics and Business, continued**AGRICULTURAL EQUIPMENT SYSTEMS MANAGEMENT CONCENTRATION**

First Year	Hours Credit
Agricultural Economics 110.....	1
Agriculture and Natural Resources 290	3
Biology 111*, 112*.....	8
¹ Cultures and Civilizations*	6
English 101*, 102*.....	6
Mathematics 123*, 125*	6
Second Year	
Accounting 200	3
Agricultural Economics 212.....	3
Biosystems Engineering Technology 202.....	3
Chemistry 120*.....	4
Economics 201*	4
¹ Arts and Humanities Elective*	3
Physics 161*	3
Environmental and Soil Science 210	4
Statistics 201*	3
Third Year	
Agricultural Economics 310, 320, 342, 350, 412	13
Environmental and Soil Sciences 324	3
Biosystems Engineering Technology 326.....	3
Agricultural and Extension Education 440* or English 360* or Journalism and Electronic Media 201*	3
¹ Arts and Humanities Elective*	3
Psychology 110* or Political Science 102* or Sociology 120*	3
Communication Studies 210* or 240*	3
Fourth Year	
Agricultural Economics 410, 442	4
² Agricultural Economics or Rural Sociology Electives	9
Biosystems Engineering Technology 432, 442, 452, 462.....	12
Economics 313.....	3
Statistics 320 or 365.....	3
Total	122

* Meets University General Education Requirement.

¹ Choose any course from University General Education list.

² A minimum of 6 credit hours must be taken from the following list of courses: Agricultural Economics 315, 330, 337, 355, 360, 420, 430, 444, 450, 470. A maximum of 3 credit hours can be used from each of the following courses: Agricultural Economics 356, 492, and 493.

AGRICULTURAL SCIENCE MAJOR

First Year	Hours Credit
Agriculture and Natural Resources 100	1
Agriculture and Natural Resources 290	3
Animal Science 160	3
¹ Chemistry 100*, 110* or 120*, 130*	8
English 101*, 102*	6
Mathematics 113* and Quantitative Reasoning Course*	6
Plant Sciences 115	3
Second Year	
Agricultural and Extension Education 211	3
Agricultural Economics 212	3
Food Science and Technology 101	3
¹ Biology 130*, 140* or 101*, 102*	8
Environmental and Soil Sciences 210	4
Plant Sciences 250	3
² Economics Elective	3-4
Communication Studies 210* or 240*	3
Third Year	
Agricultural Economics 342	3
Entomology and Plant Pathology 313 or 321	3
^{3,4} Cultures and Civilizations Elective*	3
^{3,4} Arts and Humanities Elective*	3
Plant Sciences 330 or 430	2-3
⁵ Minor	15
Fourth Year	
⁵ Minor	9
⁴ Agricultural Sciences and Natural Resources Electives	9
^{3,4} Arts and Humanities Elective*	3
^{3,4} Cultures and Civilizations Elective*	3
^{2, 3, 4} Social Sciences Elective*	3-6
⁴ Free Electives	2-5
Total	124

* Meets University General Education Requirement.

¹ Chemistry 130 is a prerequisite/corequisite to Biology 140, therefore a student selects Chemistry 120-130 and Biology 130-140; otherwise the student must elect Chemistry 100-110 and Biology 101-102.

² Economics 201(4) satisfies the University General Education-Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credits, it will satisfy the major requirement, but will not satisfy the General Education-Social Science requirement. In these cases, the student should take two courses from the Social Sciences list.

³ Choose from the University General Education lists.

⁴ One of the University General Education Electives, Agricultural Sciences and Natural Resources Electives, Free Electives or a course taken as part of one of the minors must be a Communicating through Writing (WC) course.

⁵ Students should select one of the minors offered by the College of Agricultural Sciences and Natural Resources: agricultural economics, animal science, biosystems engineering technology, entomology and plant pathology, environmental and soil sciences, food science and technology, forestry, international agriculture and natural resources, plant sciences, wildlife and fisheries science, or one of the minors in the College of Communication and Information (see listing in this catalog), or submit an individualized plan of study before the third year, for approval by the advisor, department head, and the Dean's Office. If the minor is less than 23 hours, the excess hours will become free electives.

Agricultural Science, continued

AGRICULTURAL EDUCATION CONCENTRATION

First Year	Hours Credit
Agriculture and Natural Resources 100	1
Agriculture and Natural Resources 290	3
Educational Psychology 210	3
¹ Chemistry 100*, 110* or 120*, 130*	8
English 101*, 102*	6
Mathematics 113* and 115*	6
Economics 201*	4
Environmental and Soil Sciences 120* or 220*	3
Second Year	
Agricultural Economics 212.....	3
Agricultural and Extension Education 211	3
Agricultural and Extension Education 201	1
¹ Biology 101*, 102* or 130*, 140*	8
Environmental and Soil Sciences 210	4
Plant Sciences 230 and 290 or 291	6
Animal Science 220	3
² Arts and Humanities Elective*	3
Food Science and Technology 461	3
Third Year	
Agricultural and Extension Education 345	3
Biosystems Engineering Technology 202 and 452.....	6
Educational Psychology 401	3
Special Education 402	3
Entomology and Plant Pathology 313 or 321.....	3
² Cultures and Civilizations Elective*	3
Plant Sciences 250	3
² Social Sciences Elective*	3
Forestry, Wildlife and Fisheries 212 or 317	3
Fourth Year	
Agricultural and Extension Education 435 and 436	12
Agricultural and Extension Education 440*	3
Agricultural and Extension Education 434	3
Animal Science 360* and 381	6
¹ Arts and Humanities Elective*	3
Total 125	

* Meets University General Education Requirement.

¹ Chemistry 130 is a prerequisite/corequisite to Biology 140, therefore a student selects Chemistry 120-130 and Biology 130-140; otherwise the student must elect Chemistry 100-110 and Biology 101-102.

² Choose from the University General Education lists.

Agricultural Science, continued
AGRICULTURAL EXTENSION EDUCATION CONCENTRATION

First Year	Hours Credit
Agricultural and Extension Education 211	3
Agriculture and Natural Resources 100	1
Agriculture and Natural Resources 290	3
Animal Science 280	3
¹ Chemistry 100*, 110* or 120*, 130*	8
English 101*, 102*	6
Mathematics 113* and Quantitative Reasoning course*	6
Second Year	
Agricultural and Extension Education 201	1
Agricultural Economics 212	3
Animal Science 220	3
¹ Biology 101*, 102* or 130*, 140*	8
Economics 201*	4
Psychology 110*	3
Environmental and Soil Sciences 210	4
Plant Sciences 115	3
Communication Studies 210*	3
Third Year	
Agricultural and Extension Education 345	3
Agricultural Economics 342	3
Animal Science 330	3
Entomology and Plant Pathology 313 (recommended course) or 321	3
Environmental and Soil Sciences 344	3
Food Science and Technology 269	2
Forestry, Wildlife and Fisheries 250	3
^{2,3} Cultures and Civilizations Elective*	3
^{2,3} Arts and Humanities Elective*	3
Plant Sciences 250	3
Fourth Year	
³ Agricultural Sciences and Natural Resources Electives	3
Animal Science 381	3
Agricultural and Extension Education 434	3
Biosystems Engineering Technology 432	3
Biosystems Engineering Technology 442	3
Biosystems Engineering Technology 462	3
³ Free Electives	6-7
^{2,3} Cultures and Civilizations Elective*	3
^{2,3} Arts and Humanities Elective*	3
Plant Sciences 330 or 430	2-3
Total 124	

* Meets University General Education Requirement.

¹ Chemistry 130 is a prerequisite/corerequisite to Biology 140, therefore a student selects Chemistry 120-130 and Biology 130-140; otherwise the student must elect Chemistry 100-110 and Biology 101-102.

² Choose from the University General Education lists.

³ One of the University General Education Electives, Agricultural Sciences and Natural Resources Electives or Free Electives must be a writing-intensive (WC) course.

ANIMAL SCIENCE MAJOR**PRODUCTION/BUSINESS/COMMUNICATION CONCENTRATION**

First Year	Hours Credit
Animal Science 160	3
Biology 130*-140* or 101*-102*	8
English 101*-102*	6
Mathematics 125* or 141* or 151* and second approved Quantitative Reasoning Course*	6-8
Chemistry 100*, 110* or 120*, 130*	8
Second Year	
Animal Science 220, 280*	6
Agriculture and Natural Resources 290	3
Environmental and Soil Sciences 210	4
Economics 201*	4
¹ Arts and Humanities Electives*	6
² Business Administration minor or	
³ Agricultural Economics and Business minor or	
⁴ Communication and Information minor	3
¹ Social Science Elective*	3
Free Electives	3
Third Year	
Animal Science 320, 330, 340, 380, 395	13
Biological Science Restricted Elective	3
¹ Cultures and Civilizations Electives*	6
Animal Science 360*	3
² Business Administration minor OR ³ Agricultural Economics and Business minor	
OR ⁴ Communication and Information minor	6
Fourth Year	
Animal Science 430,495	4
Select two courses from: Animal Science 481 or 482; 483 or 484; 485 or 489.....	6
² Business Administration minor (10 credits) OR ³ Agricultural Economics and Business minor (9	
credits) OR ⁴ Communication and Information minor (9 credits)	9-10
Free Electives	8-11
	Total 124

* Meets University General Education Requirement.

¹ Courses selected from the University General Education lists. Animal Science 280 satisfies the WC requirement. Animal Science 360 satisfies the OC requirement.

² Requirements for the business administration minor are Accounting 200 (3); Economics 201 (4); Statistics 201 (3); Business Administration 201 (4); Finance 301 (3); Marketing 300 (3); Management 300 (3). Total 23 hours.

³ Requirements for the agricultural economics and business minor are Economics 201 (4); Accounting 200 (3); Agricultural Economics 212, 342, 350, 412 (12); Agricultural Economics elective (3). Total 22 hours.

⁴ Requirements for the communication and information minor are Communication and Information 150 (3); select 6 hours from Advertising 250, Communication Studies 201; Information Sciences 102, Journalism and Electronic Media 200 or 275, or Public Relations 270; select 9 hours of 300-level or above from one or more of the following areas: advertising, communication studies, information sciences, journalism and electronic media, or public relations. Total 18 hours.

Animal Science, continued
SCIENCE/TECHNOLOGY CONCENTRATION

First Year	Hours Credit
Animal Science 160	3
Biology 130*- 140*	8
English 101*-102*	6
Mathematics 125* or 141* or 151* and second approved Quantitative Reasoning Course.....	6-8
Chemistry 120*-130*	8
Second Year	
Animal Science 220, 280*	6
Agriculture and Natural Resources 290.....	3
Communication Studies 210* or 240* or Animal Science 360*	3
¹ Arts and Humanities Elective*	3
Economics 201*	4
Physical Science and Mathematics Restricted Elective	8
Biological Science Restricted Elective	3
Third Year	
Animal Science 320, 330, 340, 380, 395	13
Biological Science Restricted Elective	8
Physical Science and Mathematics Restricted Elective	6
¹ Cultures and Civilizations Elective*	3
Fourth Year	
Animal Science 495	1
Select two courses from Animal Science 481 or 482; 483 or 484; 485 or 489.....	6
¹ Arts and Humanities Elective*	3
Biological Science Restricted Elective	3
¹ Cultures and Civilizations Elective*	3
¹ Social Science Elective*	3
Business Elective	5
Free Electives	7-9
	Total 124

* Meets University General Education Requirement.

¹ Courses selected from University General Education lists. Animal Science 280 satisfies the WC requirement. Animal Science 360 satisfies the OC requirement.

Animal Science, continued**SCIENCE/TECHNOLOGY – PRE-VETERINARY MEDICINE CONCENTRATION**

First Year	Hours Credit
Animal Science 160	3
Biology 130*-140*	8
English 101*- 102*	6
Mathematics 125* or 141* or 151* and second approved Quantitative Reasoning Course	6-8
Chemistry 120*-130*	8
Second Year	
Animal Science 220, 280*	6
Agriculture and Natural Resources 290	3
Communication Studies 210* or 240* or Animal Science 360*	3
¹ Arts and Humanities Elective*	3
Economics 201*	4
Chemistry 350, 360, and 369	8
Biology 240	4
Third Year	
Animal Science 320, 330, 340, 380, 395	13
Biological Science Restricted Elective	3
Physics 221*-222*	8
¹ Arts and Humanities Elective*	3
¹ Cultures and Civilizations Elective*	3
Fourth Year	
Animal Science 495	1
Select two courses from Animal Science 481 or 482; 483 or 484; 485 or 489	6
Biological Science Restricted Elective	3
Biochemistry and Cellular and Molecular Biology 401	4
¹ Cultures And Civilizations Elective*	3
¹ Social Science Elective*	3
Business Elective	5
Free Electives	5-7
	Total 124

* Meets University General Education Requirement.

¹ Courses selected from University General Education lists. Animal Science 280 satisfies the WC requirement. Animal Science 360 satisfies the OC requirement.

Animal Science, continued

PRE-VETERINARY MEDICINE PROGRAM (3+1)

This program allows students to be awarded a Bachelor of Science in Animal Science after the successful completion of the first two semesters in the College of Veterinary Medicine (CVM). Students must begin this program early in the pre-veterinary curriculum. The specific requirements are as follows.

- Completion of all pre-veterinary requirements. English Composition 101, 102 (3,3) – 6 hours; Humanities and Social Sciences – 18 hours; Elements of Physics 221, 222 (4,4) – 8 hours; General Chemistry 120-130 (4,4) – 8 hours; Organic Chemistry 350, 360 and Laboratory 369 (3,3,2) – 8 hours; Cellular and Comparative Biochemistry 401 (4) – 4 hours; General Biology 130, 140 (4,4) – 8 hours; Biology 240 – 4 hours or Animal Science 340 – 3 hours; Biology Elective – 4 hours.
- The last 30 hours of the three-year pre-veterinary curriculum must be taken at the University of Tennessee, Knoxville.
- At least 12 hours of upper-division (300- and 400-level courses) technical agriculture courses must be taken at the University of Tennessee, Knoxville.

In addition to all the required pre-veterinary medical courses, the following (or approved equivalents) must be completed before entering the College of Veterinary Medicine.

- Mathematics 125 or 141 or 151 plus any QR;
- Animal Science 160 – 3 hours; Animal Science 220 – 3 hours; Animal Science 320 – 3 hours; Animal Science 330 – 3 hours; Animal Science 340 – 3 hours; Animal Science 380 – 3 hours;
- Agriculture and Natural Resources 290 – 3 hours;
- Economics 201 – 4 hours;
- Communication Studies 210 or 240 or Animal Science 360 – 3 hours.

NOTE: Economics 201 and Communication Studies 210 or 240 will be accepted by the CVM as meeting requirements in Humanities/Social Science category. The remainder must be a Social Science elective, Arts and Humanities electives (6 hours) and Cultures and Civilizations electives (6 hours); one of which must be writing intensive.

- Satisfactory completion of the first two semesters in the College of Veterinary Medicine professional program.
- No later than the first day of the first semester of the student's first year in the College of Veterinary Medicine, (s)he should contact the Department of Animal Science in order to check on graduation procedures for this program.
- A total of 124 hours must be completed by the end of the first year in the College of Veterinary Medicine.

First Year	Hours Credit
Animal Science 160	3
Biology 130*- 140*	8
English 101*- 102*	6
Mathematics 125* or 141* or 151* and second approved Quantitative Reasoning Course.....	6-8
Chemistry 120*-130*	8
Second Year	
Animal Science 220, 280*	6
Biology 240	4
Agriculture and Natural Resources 290	3
Communication Studies 210* or 240* or Animal Science 360*	3
Chemistry 350, 360, 369	8
Physics 221*-222*	8

Animal Science, continued**PRE-VETERINARY MEDICINE PROGRAM (3+1) (continued)****Third Year**

Animal Science 320, 330, 340, 380, 395	13
Biochemistry and Cellular and Molecular Biology 401.....	4
¹ Arts and Humanities Elective*	6
Economics 201*	4
¹ Cultures and Civilizations Elective*	6
¹ Social Science Elective*	3
	Total 99-101

* Meets University General Education Requirement.

¹ Courses selected from University General Education lists. Animal Science 280 satisfies the WC requirement. Animal Science 360 satisfies the OC requirement.

BIOSYSTEMS ENGINEERING MAJOR

First Year	Hours Credit
Biosystems Engineering 104	1
Engineering Fundamentals 105, 151, 152, 202.....	11
¹ Chemistry 120*	4
^{1, 2} Mathematics 141*, 142*	8
¹ English 101*, 102*	6
³ Cultures and Civilizations Elective*	3
Second Year	
Biosystems Engineering 201, 221, 231, 321	10
Mechanical Engineering 231, 321.....	6
Nuclear Engineering 203.....	3
Mathematics 231, 241.....	7
Microbiology 210*	3
Environmental and Soil Sciences 210	4
Third Year	
Biosystems Engineering 411, 416, 431, 451	13
Statistics 251	3
Electrical and Computer Engineering 301	3
Mathematics 200.....	1
⁴ Fluid Science Elective.....	3
⁵ Technical Elective.....	3
³ Arts and Humanities Elective*	3
English 360*	3
Fourth Year	
Biosystems Engineering 401*, 402, 404, 444.....	14
⁵ Technical Elective.....	3
Economics 201 (Social Sciences Elective)*.....	4
³ Social Sciences Elective*	3
³ Arts and Humanities Elective*	3
³ Cultures and Civilizations Elective*	3
Total 128	

* Meets University General Education Requirement.

¹ Or equivalent honors course.

² If mathematics placement test does not indicate placement into at least Mathematics 141, discuss mathematics options with advisor.

³ Select from the corresponding University General Education list after consultation with advisor.

⁴ Select from Civil and Environmental Engineering 390 or Aerospace Engineering 341 after consultation with advisor.

⁵ Typically, upper-division courses in engineering or related areas. Must be approved in advance by advisor.

Biosystems Engineering, continued

PRE-PROFESSIONAL CONCENTRATION

First Year	Hours Credit
Biosystems Engineering 104.....	1
Engineering Fundamentals 105, 151, 152, 202.....	11
¹ Chemistry 120*, 130*.....	8
^{1, 2} Mathematics 141*, 142*.....	8
¹ English 101*, 102*.....	6
Second Year	
Biosystems Engineering 201, 221, 231, 321.....	10
Mechanical Engineering 231, 321.....	6
Nuclear Engineering 203.....	3
Mathematics 231, 241.....	7
Biology 130*.....	4
Chemistry 350.....	3
Third Year	
Biosystems Engineering 411, 431, 451.....	10
Statistics 251.....	3
Electrical and Computer Engineering 301.....	3
Mathematics 200.....	1
³ Fluid Science Elective.....	3
English 360*.....	3
Chemistry 360, 369.....	5
⁴ Arts and Humanities Elective*.....	3
Fourth Year	
Biosystems Engineering 401*, 402, 404, 444.....	14
Economics 201 (Social Sciences Elective)*.....	4
⁴ Social Sciences Elective*.....	3
⁴ Arts and Humanities Elective*.....	3
⁴ Cultures and Civilizations Electives*.....	6
Total 128	

* Meets University General Education Requirement.

¹ Or equivalent honors course.

² If mathematics placement test does not indicate placement into at least Mathematics 141, discuss mathematics options with advisor.

³ Select from Civil and Environmental Engineering 390 or Aerospace Engineering 341 after consultation with advisor.

⁴ Select from the corresponding University General Education list after consultation with advisor.

ENVIRONMENTAL AND SOIL SCIENCES MAJOR

AGRICULTURAL SYSTEMS TECHNOLOGY CONCENTRATION

First Year	Hours Credit
Biology 111*, 112*	8
Chemistry 120*, 130*	8
English 101*, 102*	6
Mathematics 151*, 152*	6
¹ Social Sciences Elective*	3
Second Year	
Agricultural Economics 212	3
Agriculture and Natural Resources 290	3
Biosystems Engineering Technology 212	3
¹ Cultures and Civilizations Elective*	3
Economics 201*	4
Environmental and Soil Sciences 210, 334	7
Communication Studies 210* or 240*	3
Physics 221*	4
Statistics 201*	3
Third Year	
Accounting 200	3
Agricultural Economics 350 or 355	3
¹ Arts and Humanities Elective*	3
Biosystems Engineering Technology 326	3
¹ Cultures and Civilizations Elective*	3
English 360*	3
Entomology and Plant Pathology 313, 321	6
Environmental and Soil Sciences 301*	1
Environmental and Soil Sciences 324	3
Plant Sciences 457	2
Fourth Year	
¹ Arts and Humanities Elective*	3
Biosystems Engineering Technology 414, 432, 434, 462, 474	15
Agricultural Economics 412	3
Technical Electives	9
Total 124	

* Meets University General Education Requirement.

¹ Choose from the University General Education lists.

TECHNICAL ELECTIVES

Note that some electives have required prerequisites. The prerequisites are either required in the major or are listed below. See individual course descriptions in the catalog for specific information.

Accounting 200;
Agricultural and Extension Education 450;
Agricultural Economics 342, 350, 355;
Biosystems Engineering Technology 202, 442, 452;
Business Administration 201;
Entomology and Plant Pathology 325, 410;
Environmental and Soil Sciences 442, 444, 462;
Industrial Engineering 304, 423;
Marketing 300;
Plant Sciences 240, 410, 430, 434, 435.

Environmental and Soil Sciences, continued

ENVIRONMENTAL SCIENCE CONCENTRATION

First Year	Hours Credit
Biology 130*, 140*.....	8
Chemistry 120*, 130*	8
English 101*, 102*.....	6
Environmental and Soil Sciences 120*	3
Mathematics 151*, 152*	6
Second Year	
¹ Arts and Humanities Elective*	3
Agriculture and Natural Resources 290	3
Biology 250	4
Economics 201*	4
Environmental and Soil Sciences 210	4
Geology 101*	4
Microbiology 210*.....	3
Statistics 201*	3
Physics 221*	4
Third Year	
English 295* or 360* or Agricultural and Extension Education 440*	3
Biosystems Engineering Technology 326.....	3
Chemistry 350 or 110*	3-4
¹ Cultures and Civilizations Elective*	3
Environmental and Soil Sciences 301*, 324, 334, 355.....	10
¹ Social Sciences Elective*	3
Philosophy 245*	3
Technical Elective	3
Fourth Year	
Agricultural Economics 470 or Economics 462 or Industrial Engineering 405	3
Biosystems Engineering Technology 212 or 474.....	3
Environmental and Soil Sciences 434, 444, 462	9
Technical Electives	9
Free Electives	5-6
Total 124	

* Meets University General Education Requirement.

¹ Choose from the University General Education lists.

TECHNICAL ELECTIVES

Note that some electives have required prerequisites. The prerequisites are either required in the major or are listed below. See individual course descriptions in the catalog for specific information.

Animal Science 220, 280, 320, 330, 380, 381;	Forestry 314, 321;
Biochemistry and Cellular and Molecular Biology 306, 310, 321, 401, 402, 404, 411, 471, 481;	Forestry, Wildlife and Fisheries 250, 312, 313, 317, 410, 412, 420;
Biology 240, 250;	Geography 101, 102, 131, 132, 310, 334, 410, 411, 412, 413, 415, 434, 436, 439;
Biosystems Engineering Technology (any course not required for the major);	Geology 102,103, 201, 202, 203, 310, 345, 370, 381, 450, 455, 485, 486;
Chemistry 230, 310, 319, 320, 329, 350, 360, 369, 430, 439, 471,481;	Management 301, 321, 431;
Ecology and Evolutionary Biology 240, 304, 305, 330, 370, 380, 410, 414, 421, 433, 470, 474, 484, 495;	Microbiology 310, 319, 410, 411, 470; Physics 222;
Entomology and Plant Pathology 313, 321, 451;	Plant Sciences 335, 434, 435, 457, 461;
Environmental and Soil Sciences (any course not required for the major);	Political Science 300, 330, 340, 402, 430, 431, 440, 442,470;
Food Science and Technology 420, 429;	Public Health 310; Sociology 360,462,464,465;
	Statistics (any course above 201);
	University Studies 322

Environmental and Soil Sciences, continued
SOIL SCIENCE CONCENTRATION

First Year	Hours Credit
Biology 130*, 140*.....	8
Chemistry 120*, 130*	8
English 101*, 102*.....	6
Environmental and Soil Sciences 120*	3
Mathematics 151*, 152*	6
Second Year	
Agriculture and Natural Resources 290	3
¹ Arts and Humanities Elective*	3
¹ Cultures and Civilizations Elective*	3
Economics 201*	4
Environmental and Soil Sciences 210	4
Geology 101*	4
Microbiology 210*.....	3
Physics 221*	4
Statistics 201*	3
Third Year	
Biosystems Engineering Technology 212 or 326	3
Chemistry 110* or 350	3-4
Chemistry 310 and 319	4
Environmental and Soil Sciences 301*, 324, 334, 355.....	10
Philosophy 245*	3
Plant Sciences 335	3
Technical Electives	3
English 295* or 360*, or Agricultural and Extension Education 440*	3
Fourth Year	
Agricultural Economics 470 or Economics 462	3
Environmental and Soil Sciences 434, 442, 444, 462	12
¹ Social Sciences Elective*	3
Technical Electives	6
Free Electives	5-6
Total 124	

* Meets University General Education Requirement.

¹ Choose from the University General Education lists.

TECHNICAL ELECTIVES

Note that some electives have required prerequisites. The prerequisites are either required in the major or are listed below. See individual course descriptions in the catalog for specific information.

Animal Science 220, 280, 320, 330, 380, 381;	Geography 101, 102, 131, 132, 310, 334, 410, 411, 412, 413, 415, 434, 436, 439;
Biochemistry and Cellular and Molecular Biology 306, 310, 321, 401, 402, 404, 411, 471, 481;	Geology 102,103, 201, 202, 203, 310, 345, 370, 381, 450, 455, 485, 486;
Biology 240, 250;	Management 301, 321, 431;
Biosystems Engineering Technology (any course not required for the major);	Microbiology 310, 319, 410, 411, 470;
Chemistry 230, 310, 319, 320, 329, 350, 360, 369, 430, 439, 471,481;	Physics 222; Plant Sciences 335, 434, 435, 457, 461;
Ecology and Evolutionary Biology 240, 304, 305, 330, 370, 380, 410, 414, 421, 433, 470, 474, 484, 495;	Political Science 300, 330, 340, 402, 430, 431, 440, 442,470;
Entomology and Plant Pathology 313, 321, 451;	Public Health 310; Sociology 360,462,464,465;
Environmental and Soil Sciences (any course not required for the major);	Statistics (any course above 201);
Food Science and Technology 420, 429; Forestry 314, 321;	University Studies 322.
Forestry, Wildlife and Fisheries 250, 312, 313, 317, 410, 412, 420;	

FOOD SCIENCE AND TECHNOLOGY MAJOR

PRE-PROFESSIONAL CONCENTRATION

This curriculum meets the requirements for entrance to the College of Veterinary Medicine or UT medical, dental or pharmacy schools. After the first successful year in the professional school, the student will be awarded a Bachelor of Science in Food Science with a major in food science and technology. Should the student not gain admittance after the junior year, the student could complete the following requirements during the senior year for a major in food science and technology with a preprofessional concentration.

First Year	Hours Credit
¹ English*	6
² Mathematics 125* or 141* or 151*	3-4
Biology 130*- 140*	8
Chemistry 120*-130*	8
Food Science and Technology 101	3
Agriculture and Natural Resources 290	3
Second Year	
Chemistry 350, 360-369	8
Microbiology 210* or higher	3
³ Physics 221*	4
⁴ Social Sciences Electives*	6
Food Science and Technology 340	3
⁵ Directed Science Requirements	12
Third Year	
Food Science and Technology 301 or University Honors 117	1
Food Science and Technology 410-419 and 420-429	9
⁵ Directed Science Requirements	9
⁴ Arts and Humanities Electives*	6
Statistics 201* or Quantitative Reasoning Elective*	3
⁴ Cultures and Civilizations Electives*	6
Fourth Year	
Food Science and Technology 401 or University Honors 458	1
⁶ Food Science and Technology Electives	9
Nutrition 100*	3
Communicating Orally Elective	1-3
Electives	6-9
	Total 124

* Meets University General Education Requirement.

¹ Select either English 101 and 102 or English 118 and 102. Students who obtain a grade of A or B in 118 may complete their freshman requirement with 102, 355, or with a 200-level course in the English Department. The 200-level course may, if so listed, also be used toward the Arts and Humanities requirement.

² Mathematics placement depends on high school courses and grades and ACT scores.

³ Physics 222 is taken as a directed science elective for pre-professional programs that require it.

⁴ Choose from the University General Education lists. One of these courses must be a writing-intensive (WC) course.

⁵ May be chosen from Biochemistry and Cellular and Molecular Biology 230, 401, 402, Microbiology 319, 430, Physics 222, Ecology and Evolutionary Biology 240; Biology 240, Food Science and Technology 415, 430, 441, 490, 495 or 493 (maximum of 3 hours); or Nutrition 420.

⁶ May be chosen from Food Science and Technology 150, 240, 415, 430, 442, 441, 445, 461, 462, 490, 495 or 493 (maximum of 3 hours).

Food Science and Technology, continued
SCIENCE CONCENTRATION

First Year	Hours Credit
¹ English*	6
² Mathematics 125*, 141* or 151*	3-4
³ Biological Sciences	4
Chemistry 120*, 130*	8
Food Science and Technology 101	3
Agriculture and Natural Resources 290	3
⁴ Arts and Humanities Elective*	3
Second Year	
Chemistry 350, 360-369	8
Microbiology 210* or higher	3
Physics 221*	4
⁴ Social Sciences Electives*	6
⁴ Arts and Humanities Elective*	3
Food Science and Technology 340	3
Nutrition 100* or 300	3
Third Year	
Food Science and Technology 301 or University Honors 117	1
Food Science and Technology 410, 419 and 430	7
Biochemistry and Cellular and Molecular Biology 310 or 401	4
Food Science and Technology 441	3
Statistics 201* or Quantitative Reasoning Elective*	3
⁴ Cultures and Civilizations Electives*	6
⁴ Communicating Orally Elective*	3
Electives	5
Fourth Year	
Food Science and Technology 401	1
Food Science and Technology 420, 429	5
Food Science and Technology 415, 445, 462, 490, 495	16
Food Science and Technology 493	3
Electives	6-7
Total 124	

* Meets University General Education Requirement.

¹ May select either English 101 and 102 or English 118 and 102. Students who obtain a grade of A or B in 118 may complete their freshman requirement with 102, 355, or with a 200-level course in the English Department. The 200-level course may, if so listed, also be used toward the Arts and Humanities (AH) requirement.

² Mathematics placement depends on high school courses and grades and ACT scores.

³ May be chosen from Biology 101, 102, 111, 112 or 130.

⁴ Chosen from the University General Education lists. One of these courses must be an approved Communicating through Writing (WC) course.

Food Science and Technology, continued

TECHNOLOGY/BUSINESS CONCENTRATION

First Year	Hours Credit
¹ English*	6
² Mathematics 110* or 123* or 125* or higher	3
³ Biological Sciences*	4
Chemistry 100* or 120*	4
⁴ Arts and Humanities Electives*	6
Food Science and Technology 101	3
Agriculture and Natural Resources 290	3
Second Year	
Chemistry 110*	4
Microbiology 210* or higher	3
Food Science and Technology 240	3
⁴ Social Sciences Electives*	6
⁵ Directed Technology/Business Electives	9
Food Science and Technology 340	3
Nutrition 100* or Animal Science 381	3
Third Year	
Food Science and Technology 301 or University Honors 117	1
Food Science and Technology 410-419 and 430	7
⁴ Cultures and Civilizations Electives*	6
⁵ Directed Technology/Business Electives	9
Statistics 201* or Mathematics 115*	3
Communicating Orally Elective*	1-3
Electives	3-5
Fourth Year	
Food Science and Technology 401	1
Food Science and Technology 420, 429	5
Food Science and Technology 445, 460, 490, and 495	13
⁵ Directed Technology/Business Electives	3
Food Science and Technology 493	3
Electives	7
Total 124	

* Meets University General Education Requirement.

¹ May select either English 101 and 102 or English 118 and 102. Students who obtain a grade of A or B in 118 may complete their freshman requirement with 102, 355, or with a 200-level course in the English Department. The 200-level course may, if so listed, also be used toward the Arts and Humanities (AH) requirement.

² Mathematics placement depends on high school courses and grades and ACT scores. Mathematics 125 needed for Statistics 201.

³ May be chosen from Biology 101, 102, 111, 112 or 130.

⁴ Choose from the University General Education lists. One of these courses must be an approved Communicating through Writing (WC) course.

⁵ Lists of appropriate courses are available at <http://foodscience.utk.edu/academics/undergraduate/curriculum.html> and should be selected in conference with academic advisor to match student's interests with concentrations needed in the food industry.

FORESTRY MAJOR

Enrollment Management Plan

All majors in the Department of Forestry, Wildlife and Fisheries must submit an application for progression with relevant career goals, names of three references, work experience (both volunteer and paid positions) related to natural resources and service and professional activities, and a transcript before registering for junior classes.

To be considered for progression into the upper division of the program, applicants must have submitted all required documents (application form, resume, and transcript) by a March 15 deadline late in the spring semester.

Those students who have met all preliminary requirements for progression, including having relevant career goals, will be ranked based on the combined score of their cumulative grade point average (GPA) and GPA in core courses. The combined score will be 50% cumulative GPA (minimum 2.20) and 50% cumulative GPA (minimum 2.20) in core courses. Applicants with the highest scores will be accepted into the programs. The number of applicants accepted into each program will be determined based on resources available. Applicants will be notified of their acceptance by the start of registration for summer semester.

Applicants who are not accepted into the program and who believe that extenuating circumstances prevented their acceptance into the program may appeal the decision to a faculty committee (i.e., S.A.C.). A written statement in which the case is made for acceptance is required for all applicants. It must be submitted within one week of the rejection notice.

Appellants receiving a positive response from the appeals committee will be accepted into programs on a provisional basis through the first semester of their junior year. The progress of provisional students will be reviewed at the end of the fall semester. At that time, they will either be fully admitted or released from the program.

Core Courses

Students must have completed or be enrolled in all core courses by the end of the semester in which they apply for acceptance into upper-division courses. They must complete all core courses before entering upper-division courses. They will also need the prerequisites to the individual upper-division courses.

Forestry

- Two courses in English composition (English 101 and 102 or equivalent);
- Calculus (Mathematics 125 or equivalent);
- General chemistry (Chemistry 100 or equivalent);
- Two courses in general botany (Biology 111 and 112 or equivalent);
- General economics (Economics 201 or equivalent);
- Public speaking (Communication Studies 210 or 240 or equivalent);
- Statistics (Statistics 201 or equivalent);
- Ecology (Forestry 215 or Biology 250 or equivalent).

Forestry, continued**FOREST RESOURCES MANAGEMENT CONCENTRATION**

First Year	Hours Credit
Forestry 100	3
English 101*, 102*	6
Mathematics 125*	3
Biology 111*, 112*	8
Chemistry 100*	4
¹ Social Science Elective*	3
Free Electives	3
Second Year	
Forestry 214, 215	6
Forestry, Wildlife and Fisheries 212	3
Economics 201*	4
Statistics 201*	3
Biosystems Engineering Technology 326 or Geography 411	3
Communication Studies 210* or 240*	3
Environmental and Soil Science 210	4
³ Cultures and Civilizations Elective*	3
Third Year	
Forestry, Wildlife and Fisheries 312*, 313, 317	8
Forestry 305, 306, 314, 321, 322, 323, 326, 329	19
³ Arts and Humanities Elective*	3
Fourth Year	
Forestry, Wildlife and Fisheries 412, 416	6
Forestry 331, 332, 420, 422	8
Wildlife and Fisheries Science 433, 443, 444, or 445	3
⁴ Ethics Elective	3
³ Cultures and Civilization Elective*	3
³ Arts and Humanities Elective*	0-3
² Communication Elective	3
Free Electives	2-5
Total 120	

* Meets University General Education Requirement.

¹ Choose from Anthropology 130*, Political Science 102*, Psychology 110* or 117*, Sociology 110*, 117*, or 120*.

² Electives are chosen in conference with advisor.

³ General Education Electives. Choose two courses from the Cultures and Civilizations list and two courses from the Arts and Humanities list for a total 12 credit hours. Forestry, Wildlife and Fisheries 312 meets the Communicating through Writing (WC) requirement.

⁴ Choose from Philosophy 110* (AH), 130, 243* (AH, WC), 245* (AH), 290* (AH, WC), or 340* (WC). If the student selects an Ethics Elective that satisfies the Arts and Humanities General Education Requirement, then the student may select an additional Free Elective in lieu of the Arts and Humanities Elective listed in the Fourth Year.

Forestry, continued

WILDLAND RECREATION CONCENTRATION

First Year	Hours Credit
Forestry 100.....	3
English 101*-102*	6
Mathematics 125*	3
Biology 111*-112*	8
Chemistry 100*.....	4
Psychology 110*, Sociology 120*, Political Science 102*, Sociology 110*, or Anthropology 130* ¹	3
Cultures and Civilizations* or Arts and Humanities* Elective	3
Elective.....	3
Second Year	
Forestry, Wildlife and Fisheries 212.....	3
Forestry 214, 215	6
Economics 201*	4
Statistics 201*	3
Communication Studies 210* or 240*	3
Environmental and Soil Sciences 210	4
Select one from Art Media Arts 231, 236; Communication Studies 220, 270, 310, 320, 330, 420; English 295*; Journalism and Electronic Media 201*, 290, 412, 450*, 451*, 488	3
¹ Cultures and Civilizations* or Arts and Humanities* Electives	6
Third Year	
Forestry, Wildlife and Fisheries 312*, 313, 317	8
Forestry 321, 423.....	6
Forestry 314; Political Science 440, 441; Plant Sciences 427; or Management 440	2-3
Recreation 310, 410, 415, 430, 470.....	3
Biosystems Engineering Technology 212, 326; Geography 310, 410, 411, 413; Political Science 403; Agriculture and Natural Resources 290.....	3
Select one course from Sociology 345, 360, 370, 464, 465; Philosophy 245*; Geography 320, 323, 345	3
Select one course from Plant Sciences 280, 350, 370, 421, 437	2-3
¹ Cultures and Civilizations* or Arts and Humanities* Elective	3
Fourth Year	
Forestry 422,495.....	9
Forestry, Wildlife and Fisheries 412, 416.....	6
Select one from Forestry, Wildlife and Fisheries 410; Wildlife and Fisheries Science 443, 444, 445	3
Electives.....	5-7
Total 120	

* Meets University General Education Requirement.

¹ General Education Electives. Choose two courses from the Cultures and Civilizations list and two from the Arts and Humanities list for a total of 12 credit hours. Forestry, Wildlife and Fisheries 312 meets the General Education Requirement for Communicating through Writing.

PLANT SCIENCES MAJOR

LANDSCAPE DESIGN AND CONSTRUCTION CONCENTRATION

Core Courses

The core courses, which are required for entry into upper-division courses, are as follows. Two courses in English composition (English 101 and 102 or equivalent);

- Mathematics 113 or 123 or 151 or equivalent;
- Computer Sciences 100 or 102 or equivalent;
- General chemistry (Chemistry 100 or 120 or equivalent);
- Two courses in general botany (Biology 111 and 112 or equivalent);
- Soil science (Environmental and Soil Sciences 210 or equivalent);
- Basic Landscape Plants (Plant Sciences 220 or equivalent);
- Fundamentals of Landscape Design (Plant Sciences 280 or equivalent).

	Hours Credit
First Year	
¹ Arts and Humanities Elective*	3
Biology 111*, 112*	8
Chemistry 100* or 120*	4
Computer Science 100*	3
English 101*, 102*	6
Mathematics 113*, 123* or 151*	3
^{1,2} Social Sciences Elective*	3-6
Second Year	
Communication Studies 210* or 240*	3
² Economics Elective*	3-4
Environmental and Soil Sciences 210	4
Plant Sciences 210, 220, 280	9
Technical Electives	9
Unrestricted Elective	2-4
Third Year	
¹ Cultures and Civilizations Elective*	3
Plant Sciences 350, 380	6
Select from Plant Sciences 226, 230, 240, 330, 348, 360, or 370.....	5-6
Plant Sciences 290 or 291	3
Technical Electives	6
Unrestricted Electives	3-8
Third Year – Summer	
Plant Sciences 492	3
Fourth Year	
¹ Arts and Humanities Elective*	3
¹ Cultures and Civilizations Elective*	3
Plant Sciences 421, 460, 480, 485	13
Select from Plant Sciences 348, 410, 427, 429, 430, 434, 437, 441, 446, 450, 469, 470, or 493.....	5-6
Technical Electives	4-5
Total	124

* Meets University General Education Requirement.

¹ Choose from the University General Education lists. Selection should be made in conference with academic advisor.

Plant Sciences/Landscape Design and Construction, continued

2 Economics 201 satisfies the University General Education-Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credit hours, it will satisfy the major requirement for economics but will not satisfy the University General Education-Social Science requirement. In these cases, the student should take two courses from the Social Sciences list.

NOTE: Students must meet the University General Education Requirement for Communicating through Writing by selecting a course with a (WC) designation. This course may be in the major or from another discipline.

TECHNICAL ELECTIVES

Architecture 111, 180, 211, 232, 421; Art 101, 103, 191, 295;
Art Drawing 211, 212;
Art Media Arts 231, 331;
Art Painting 213, 214, 215, 216;
Biochemistry and Cellular and Molecular Biology 306;
Biology 250;
Biosystems Engineering Technology 202, 212;
Ecology and Evolutionary Biology 304, 330, 433;
Communication Studies 230, 310;
English 360*;
Entomology and Plant Pathology 201, 306, 313, 321, 410;
Environmental and Soil Science 324, 334;
Forestry 321;
Forestry Wildlife and Fisheries 211, 250, 311;
Geography 365, 366;
Geology 201, 202, 203;
Philosophy 243*, 244, 245*;
Political Science 402, 403, 446;
Spanish 211, 212.

PLANT SCIENCE, BIOTECHNOLOGY AND HORTICULTURE CONCENTRATION

Core Courses

The core courses, which are required for entry into upper-division courses, are as follows.

- Two courses in English composition (English 101 and 102 or equivalent);
- Two courses in mathematics (Mathematics 123 and 125 or Mathematics 151 and 152 or equivalent);
- Two courses in general chemistry (Chemistry 100 and 110 or 120 and 130 or equivalent);
- Two courses in general botany (Biology 111 and 112 or equivalent);
- Soil science (Environmental and Soil Sciences 210 or equivalent);
- Computer Applications to Problem Solving (Agriculture and Natural Resources 290 or equivalent).

	Hours Credit
First Year	
Biology 111*, 112*	8
Chemistry 100* and 110*, or 120* and 130*	8
English 101*, 102*	6
Mathematics 151*, 152*	6
Plant Sciences 115	3
Second Year	
Agriculture and Natural Resources 290	3
Agricultural Economics 212	3
¹ Arts and Humanities Elective*	3
Communication Studies 210* or 240*	3
¹ Cultures and Civilizations Elective*	3
Environmental and Soil Sciences 210	4
Plant Sciences 210	3
^{1,2} Social Sciences Elective*	3-6
² Economics Elective*	3-4
Technical Electives	2-3
Third Year	
Biochemistry and Cellular and Molecular Biology 321 or Forestry 414	4
¹ Cultures and Civilizations Elective*	3
English 360* for Production Horticulture Track	
OR Chemistry 350 for Science and Biotechnology Track	3
Select from Plant Sciences 235, 240, 241, 330, 370, 410, 430, 434, or 435	9
Plant Sciences 457, 458 or 457, 459; Entomology and Plant Pathology 313 or 321 or 410	6
Technical Electives	3
Unrestricted Electives	0-2
Fourth Year	
¹ Arts and Humanities Elective*	3
Select from Plant Sciences 235, 240, 241, 370, 410, 430, 434, or 435 for Production Horticulture Track;	
OR Plant Sciences 353 and 454 for Science and Biotechnology Track	6
Plant Sciences 470	3
Plant Sciences 492 or 497	3
Plant Sciences 331 and Technical Electives for Production Horticulture Track,	
OR Plant Sciences 461 for Science and Biotechnology Track	3
Technical Elective	10
Unrestricted Electives	3-4
	Total 124

* Meets University General Education Requirement.

¹ Choose from the University General Education lists. Selection should be made in conference with academic advisor.

Plant Sciences/Plant Science, Biotechnology and Horticulture, continued

² Economics 201 (4) satisfies the University General Education-Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credit hours, it will satisfy the major requirement for economics but will not satisfy the University General Education-Social Science requirement. In these cases, the student should take two courses from the Social Sciences list.

NOTE: Students must meet the University General Education Requirement for Communicating through Writing by selecting a course with a (WC) designation. This course may be in the major or from another discipline.

TECHNICAL ELECTIVES

Agricultural Economics 330, 342, 350, 412;
Accounting 200;
Biochemistry and Cellular and Molecular Biology 310, 330, 401, 402, 404;
Biology 240;
Biosystems Engineering Technology 326;
Business Administration 201;
Chemistry 350;
Ecology and Evolutionary Biology 304, 410, 414, 433;
English 360*;
Entomology and Plant Pathology 451;
Environmental and Soil Sciences 355, 442;
Finance 301;
Management 300;
Marketing 300;
Microbiology 210;
Physics 221.

PUBLIC HORTICULTURE CONCENTRATION

Core Courses

The core courses, which are required for entry into upper-division courses, are as follows.

- Two courses in English composition (English 101 and 102 or equivalent);
- Mathematics 113 or 123 or 151 or equivalent;
- Computer Sciences 100 or 102 or equivalent;
- General chemistry (Chemistry 100 or 120 or equivalent);
- Two courses in general botany (Biology 111 and 112 or equivalent);
- Soil science (Environmental and Soil Sciences 210 or equivalent);
- A plant materials course (Plant Sciences 220 or 230 or 290 or equivalent);
- Public Horticulture (Plant Sciences 226 or equivalent)

First Year	Hours Credit
¹ Arts and Humanities Elective*	3
Biology 111*, 112*	8
Chemistry 100* or 120*	4
Computer Science 100* or 102*	3
English 101*, 102*	6
Environmental and Soil Sciences 210	4
Mathematics 113*, 123*, or 151*	3
Second Year	
¹ Arts and Humanities Elective*	3
Communication Studies 240*	3
¹ Cultures and Civilizations Elective*	3
Plant Sciences 210	3
Select from Plant Sciences 220, 226, 280, 290, or 291	11
^{1,2} Social Sciences Elective*	3-6
² Economics Elective*	3-4
Technical Electives	0-3
Third Year	
¹ Cultures and Civilizations Elective*	3
Plant Sciences 230, 240, 328, 330, 348, 370, 410, 434, 436	22
Technical Electives	4-5
Third Year - Summer	
Plant Sciences 492	3
Fourth Year	
Entomology and Plant Pathology 313 or 321	3
Entomology and Plant Pathology 410	3
Plant Sciences 470	3
Select from Plant Sciences 427, 430, 437, 439, 446, or 469	10
Plant Sciences 448 or 494	3
Technical Electives	3
Plant Sciences 421 or Unrestricted Electives	3
Total 124	

* Meets University General Education Requirement.

¹ Choose from the University General Education lists. Selection should be made in conference with academic advisor.

² Economics 201 (4) satisfies the University General Education-Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credit hours, it will satisfy the major requirement for economics but will not satisfy the University General Education-Social Science requirement. In these cases, the student should take two courses from the Social Sciences list.

Plant Sciences, Public Horticulture, continued

NOTE: Students must meet the University General Education Requirement for Communicating through Writing by selecting a course with a (WC) designation. This course may be in the major or from another discipline.

TECHNICAL ELECTIVES

Accounting 415; Art 481;
Agriculture and Extension Education 345;
Communication Studies 440;
Ecology and Evolutionary Biology 309, 330, 433;
Educational Administration and Policy Studies 200;
Educational Psychology 210; English 360*;
Human Resource Development 562;
Philosophy 245*;
Public Relations 270, 470;
Recreation and Leisure Studies 201, 430.

TURFGRASS SCIENCE AND MANAGEMENT CONCENTRATION

Core Courses

The core courses, which are required for entry into upper-division courses, are as follows.

- Two courses in English composition (English 101 and 102 or equivalent);
- Two courses in mathematics (Mathematics 123 and 125 or equivalent);
- Two courses in general chemistry (Chemistry 100 and 110 or 120 and 130 or equivalent);
- Two courses in general botany (Biology 111 and 112 or equivalent);
- Soil science (Environmental and Soil Sciences 210 or equivalent);
- Turfgrass Management (Plant Sciences 240 or equivalent);
- Computer Applications to Problem Solving (Agriculture and Natural Resources 290 or equivalent)

	Hours	Credit
First Year		
¹ Arts and Humanities Elective.....	3	3
Chemistry 100* and 110*, or 120* and 130*.....	8	8
¹ Cultures and Civilizations Elective*	3	3
English 101*, 102*.....	6	6
Mathematics 123* and 125*, or 151* and 152*.....	6	6
^{1,2} Social Sciences Elective*	3-6	3-6
Second Year		
Agriculture and Natural Resources 290.....	3	3
Biology 111*, 112*.....	8	8
Communications Studies 210* or 240*	3	3
² Economics Elective*	3-4	3-4
Environmental and Soil Sciences 210	4	4
Plant Sciences 240, 241	4	4
Select from Plant Sciences 210, 220, 280, or 290.....	3	3
Unrestricted Electives	2-3	2-3
Third Year		
¹ Cultures and Civilizations Elective*	3	3
Select from Plant Sciences 210, 220, 280, 290 or 291.....	3	3
Plant Sciences 330, 331, 341, 343, 348, 442, and 457-458.....	13	13
Technical Electives	3	3
Unrestricted Electives	9	9
Third Year - Summer		
Plant Sciences 492	3	3
Fourth Year		
¹ Arts and Humanities Elective*	3	3
Biology 250 or Biochemistry and Cellular and Molecular Biology 321	4	4
Entomology and Plant Pathology 313.....	3	3
Environmental and Soil Sciences 334	3	3
Select from Plant Sciences 353, 360, 410, 421, 427, 429, 430, 434, 435, 436, 437, 446, 448*, 449, 451, 461, 469, or 494.....	6	6
Plant Sciences 441, 470	5	5
Technical Electives	4-5	4-5
	Total	124

* Meets University General Education Requirement.

¹ Choose from the University General Education lists. Selection should be made in conference with academic advisor.

² Economics 201 (4) satisfies the University General Education-Social Science requirement and the major requirement for economics. If the student transfers ECON LD for 3 credit hours, it will satisfy the major requirement for economics but will not satisfy the University General Education-Social Science requirement. In these cases, the student should take two courses from the approved Social Sciences list.

Plant Sciences/Turfgrass Science and Management, continued

NOTE: Students must meet the University General Education Requirement for Communicating through Writing by selecting a course with a (WC) designation. This course may be in the major or from another discipline.

TECHNICAL ELECTIVES

Agricultural Economics 212;
Biosystems Engineering Technology 202, 212, 452, 462;
Entomology and Plant Pathology 321, 410;
Environmental and Soil Science 324.

WILDLIFE AND FISHERIES SCIENCE MAJOR

Enrollment Management Plan

All majors in the Department of Forestry, Wildlife and Fisheries must submit an application for progression with relevant career goals, names of three references, work experience (both volunteer and paid positions) related to natural resources and service and professional activities, and a transcript before registering for junior classes.

To be considered for progression into the upper division of the program, applicants must have submitted all required documents (application form, resume, and transcript) by a March 15 deadline late in the spring semester.

Those students who have met all preliminary requirements for progression, including having relevant career goals, will be ranked based on the combined score of their cumulative grade point average (GPA) and GPA in core courses. The combined score will be 50% cumulative GPA (minimum 2.20) and 50% cumulative GPA (minimum 2.20) in core courses. Applicants with the highest scores will be accepted into the programs. The number of applicants accepted into each program will be determined based on resources available. Applicants will be notified of their acceptance by the start of registration for summer semester.

Applicants who are not accepted into the program and who believe that extenuating circumstances prevented their acceptance into the program may appeal the decision to a faculty committee (i.e., S.A.C.). A written statement in which the case is made for acceptance is required for all applicants. It must be submitted within one week of the rejection notice.

Appellants receiving a positive response from the appeals committee will be accepted into programs on a provisional basis through the first semester of their junior year. The progress of provisional students will be reviewed at the end of the fall semester. At that time, they will either be fully admitted or released from the program.

Core Courses

Students must have completed or be enrolled in all core courses by the end of the semester in which they apply for acceptance into upper-division courses. They must complete all core courses before entering upper-division courses. They will also need the prerequisites to the individual upper-division courses.

Wildlife and Fisheries Science

- Two courses in English composition (English 101 and 102 or equivalent);
- Calculus (Mathematics 125 or equivalent);
- Two courses in general chemistry (Chemistry 120/130 or 100/110 or equivalent);
- Two courses in general biology (Biology 130/140 or 101/102 or equivalent);
- General economics (Economics 201 or equivalent);
- Public speaking (Communication Studies 210 or 240 or equivalent);
- Statistics (Statistics 201 or equivalent);
- Microcomputer applications (Agriculture and Natural Resources 290 or equivalent);
- General ecology (Biology 250 or equivalent).

Wildlife and Fisheries Science, continued

WILDLIFE AND FISHERIES MANAGEMENT CONCENTRATION

First Year	Hours Credit
Forestry, Wildlife and Fisheries 250*	3
English 101*, 102*	6
¹ Biology 130*, 140* or 101*, 102*	8
¹ Chemistry 120*, 130* or 100*, 110*	8
² Cultures and Civilizations* or Arts and Humanities Elective*	6
Second Year	
Forestry, Wildlife and Fisheries 212	3
Wildlife and Fisheries Science 201	1
Economics 201*	4
Mathematics 125*	3
Statistics 201* or Mathematics 115*	3
Biosystems Engineering Technology 326 or Geography 411	3
Animal Science 220	3
Biology 250 or Forestry 215	3-4
Communication Studies 210* or 240*	3
Environmental and Soil Science 210	4
² Cultures and Civilizations* or Arts and Humanities Elective*	3
Third Year	
Wildlife and Fisheries Science 305, 323, 340, 341, 350, 440, 442	16
Forestry, Wildlife and Fisheries 312*, 313, 317	8
Ecology and Evolutionary Biology 470 or Environmental and Soil Science 324	3-4
² Cultures and Civilizations* or Arts and Humanities Elective*	3
Fourth Year	
Wildlife and Fisheries Science 443, 444, 445	9
Forestry, Wildlife and Fisheries 416	3
Forestry, Wildlife and Fisheries 412 or Forestry 321, or Forestry 422	3
Ecology and Evolutionary Biology 330 or 433	3
Ecology and Evolutionary Biology 474	4
³ Science Elective	6
² Social Science Elective*	3
Total 125-127	

* Meets University General Education Requirement

¹ Chemistry 130 is a prerequisite/corerequisite to Biology 140, therefore a student selects Chemistry 120-130 and Biology 130-140; otherwise the student must elect Chemistry 100-110 and Biology 101-102.

² General Education Electives. Choose two courses from the Cultures and Civilizations list, two courses from the Arts and Humanities list, and one from the Social Sciences list for a total 15 credit hours. Forestry, Wildlife and Fisheries 312 meets the Communicating through Writing (WC) requirement.

³ 300-level and above from animal science; biosystems engineering technology; ecology and evolutionary biology; entomology and plant pathology; environmental and soil Sciences; forestry; forestry, wildlife and fisheries; plant sciences; wildlife and fisheries science; or Geography 410, 412, 413, 436.

Wildlife and Fisheries Science, continued

WILDLIFE HEALTH CONCENTRATION

First Year	Hours Credit
Wildlife and Fisheries Science 101	1
Forestry, Wildlife and Fisheries 250.....	3
Biology 130*, 140*.....	8
Chemistry 120*, 130*	8
Mathematics 125*	3
Statistics 201* or Mathematics 115*	3
English 101*, 102*	6
Second Year	
Wildlife and Fisheries Science 201	1
Animal Science 220	3
Biology 240, 250	8
Microbiology 310, 319.....	5
Chemistry 350, 360, 369.....	8
Physics 221*, 222*	8
Third Year	
Wildlife and Fisheries Science 301	3
Forestry, Wildlife and Fisheries 317.....	3
Animal Science 380	3
Biochemistry and Cellular and Molecular Biology 440.....	3
Microbiology 420 or 430.....	3
¹ Cultures and Civilizations* or Arts and Humanities Elective*	6
Economics 201*	4
Communication Studies 210* or 240*	3
Fourth Year	
Wildlife and Fisheries Science 443, 444, 445.....	9
Microbiology 470 or ² Wildlife and Fisheries Science 496	3
Biosystems Engineering Technology 326 or Geography 411.....	3
³ Science Elective.....	3
¹ Social Science Elective*	3
¹ Cultures and Civilizations* or Arts and Humanities Elective*	6
Total 120	

* Meets University General Education Requirement.

¹ General Education Electives. Choose two courses from the Cultures and Civilizations list, two courses from the Arts and Humanities list, and one from the Social Sciences list for a total 15 credit hours. One of the Cultures and Civilizations or Arts and Humanities or Social Sciences courses must meet the Communicating through Writing (WC) requirement.

² Must be a departmental approved internship.

³ 300-level and above from animal science; biosystems engineering technology; ecology and evolutionary biology; entomology and plant pathology; environmental and soil sciences; forestry; forestry, wildlife and fisheries; plant sciences; wildlife and fisheries science; or Geography 410, 412, 413, 436.

MINORS IN CASNR

Agricultural Economics and Business

Required Courses	Hours Credit
Economics 201	4
Accounting 200	3
Agricultural Economics 212, 342, 350, 412	12
Agricultural Economics Elective	3
	Total 22

International Agriculture and Natural Resources

Required courses	Hours Credit
¹ Select Agriculture and Natural Resources 491 or the ² second course of a foreign language at the intermediate level*	3
Agriculture and Natural Resources 481	3
^{3,4} Select 2 courses from Africana Studies 235*, 236*; Anthropology 130*, 316, 319, or 463; Geography 101*, 102*, 345, 371, or 373; Global Studies 250*; Political Science 365, 370, or 471; Religious Studies 102*; or Sociology 446	6
⁴ Select 2 courses from Agricultural Economics 420; Agriculture and Natural Resources 333; Entomology and Plant Pathology 201*; Environmental and Soil Sciences 120*, 220*, 334, or 442; Forestry, Wildlife and Fisheries 420; or Plant Sciences 250	6
	Total 18

* Meets University General Education Requirement.

¹ The international experience is a planned experience in a foreign country, such as a study abroad program, semester abroad, or internship, with approval on a case-by-case basis.

² Second courses of a foreign language at the intermediate level are Arabic 222, Asian Languages 232 or 252, Asian Studies 222 or 242 or 262, Chinese 232, French 212 or 218, German 202, Hebrew 242, Italian 212, Japanese 252, Persian 262, Portuguese 212, Russian 252, or Spanish 212 or 218.

³ One course should correspond with subject matter for the continent of the international experience. If the chosen course appears on the approved University General Education list, it may be used for both the minor and the University General Education Requirement. This selected course should be completed before Agriculture and Natural Resources 491 is taken.

⁴ Only one 100-level course may be taken as a part of the minor as a prerequisite to other courses in the minor. Any deviations need to be requested via a petition.

Animal Science

Required Courses	Hours Credit
Animal Science 220	3
Animal Science 280	3
Animal Science 381	3
Animal Science 480 series	3
Nine credits from Animal Science 320, 330, 340, 360, 380, 420, 430, and the 480 series	9
	Total 21

NOTE: The core courses give the student a broad background in physiology, nutrition, and management. Careful selection of the directed electives allows the student to emphasize physiological reproduction, nutrition, or management.

Biosystems Engineering Technology

Required Courses	Hours	Credit
Biosystems Engineering Technology 202 or 212, 326, and 432	9	9
Select three from 414, 422, 434, 442, 452, 462, 474	9	9
	Total	18

Environmental and Soil Sciences

Required Courses	Hours	Credit
Environmental and Soil Sciences 210, 324, 334	10	10
Electives in Environmental and Soil Sciences and/or Biosystems Engineering Technology at the 300 level or higher.....	9	9
	Total	19

Entomology and Plant Pathology

Required Courses	Hours	Credit
Choose from Entomology and Plant Pathology 201, 213, 321, 325, 410, 411, 448, 451, 493.....	16	16
	Total	16

Food Science and Technology

Required Courses	Hours	Credit
Food Science and Technology 140	3	3
Food Science and Technology 340	3	3
Food Science and Technology 410	3	3
Food Science and Technology 420	2	2
Food Science and Technology Electives	6	6
	Total	17

Forestry

Required Courses	Hours	Credit
Forestry 100 or Forestry, Wildlife and Fisheries 250	3	3
Forestry, Wildlife and Fisheries 212, 312, 313, 412, 416, or any Forestry course	12	12
	Total	15

NOTE: Prerequisites will not be waived.

Plant Sciences

Required Courses	Hours	Credit
A minimum of 18 semester hours of upper-division plant sciences courses	18	18
	Total	18

Wildlife and Fisheries Science

Required Courses	Hours	Credit
Forestry, Wildlife and Fisheries 250.....	3	3
Forestry, Wildlife and Fisheries 317.....	3	3
Select three from Forestry, Wildlife and Fisheries 416; Wildlife and Fisheries Science 433, 443, 444, 445	9	9
	Total	15

CLASS SCHEDULE WORKSHEET

M-W-F times	T-R times	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 — 8:50						
	8:10 — 9:25					
9:05 — 9:55						
	9:40 — 10:55					
10:10 — 11:00						
	11:10 — 12:25					
11:15 — 12:05						
	12:40 — 1:55					
12:20 — 1:10						
	2:10 — 3:25					
1:25 — 2:15						
	3:40 — 4:55					
2:30 — 3:20						
	5:05 — 6:20					
3:35 — 4:25						
	6:30 — 7:45					
4:40 — 5:30						
	7:55 — 9:10					
5:45 — 6:35						
	9:20 — 10:35					
6:45 — 7:35						
7:45 — 8:35						
8:45 — 9:35						
9:45 — 10:35						

Shaded class times are P.M.

M-W-F times	T-R times	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 — 8:50						
9:05 — 9:55	8:10 — 9:25					
10:10 — 11:00	9:40 — 10:55					
11:15 — 12:05	11:10 — 12:25					
12:20 — 1:10	12:40 — 1:55					
1:25 — 2:15						
2:30 — 3:20	2:10 — 3:25					
3:35 — 4:25	3:40 — 4:55					
4:40 — 5:30	5:05 — 6:20					
5:45 — 6:35						
6:45 — 7:35	6:30 — 7:45					
7:45 — 8:35	7:55 — 9:10					
8:45 — 9:35						
9:45 — 10:35	9:20 — 10:35					

Shaded class times are P.M.



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E01-1105

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