A Message From the Dean

We’re very pleased you’re interested in learning about the College of Agricultural, Food, and Environmental Sciences. We believe you’ll find this an exciting place to pursue your education. This college has one of the nation’s premier faculties devoted to making every student experience meaningful and exciting. And we strive to maintain first-rate facilities and teaching resources.

The college is among the oldest at the University. For more than 125 years it has made important contributions to the state and, indeed, the world. We intend to carry this tradition of excellence and service into the 21st century.

The challenges are significant, but the future is bright for those who choose to lead America’s food and environmentally related industries. From production agriculture to food consumption, from processing and transportation to environmental protection, the demand for qualified graduates has never been greater. Emerging new areas of applied science and management offer a wide array of opportunities.

We equip our graduates with skills and expertise to become leaders in their careers and in their communities. This includes providing the basis for life-long learning so that our graduates can quickly adapt to an ever changing world.

As you’ll discover from this bulletin, our curricula are relevant, practical, and dynamic. The college’s programs cover basic and applied biological sciences related to plants and animals, environmental science, nutrition, food science and technology, finance, communications, engineering, education, marketing, production and processing management, and applied economics. The college also offers a wide range of experiential learning programs, including international study/travel, undergraduate research opportunities, and internships. You can take advantage of these programs while enjoying a small campus environment in the middle of the city. You can participate in clubs, teams, and the full range of activities offered by a major university.

We’re confident you can find something for you in the College of Agricultural, Food, and Environmental Sciences. We invite you to share our strength, tradition, and excellence.

Michael V. Martin
Dean, College of Agricultural, Food, and Environmental Sciences
A great place to....

...Look Back

On March 10, 1858, a bill drafted for the Minnesota Legislature, establishing an agricultural college in Glencoe, Minnesota, became law. There were to be two terms: a long summer term, April to October, and a short winter term, December to February. The students were to do three to four hours of manual labor each day on the farm, and tuition was to be free. A contract to construct a college building in Glencoe would have been signed in February 1861, but Governor Ramsey was in Washington, D.C., meeting with President Lincoln offering the first Minnesota Infantry Regiment for the defense of the Union. Plans for the College at Glencoe lay dormant during the Civil War.

In 1866, after several disputes over the use of land granted to Minnesota through the terms of the Morrill Land Grant Act, it was agreed that Glencoe was too remote for an agricultural college. The Reorganization Act of February 18, 1868, provided that the regents of the University of Minnesota were to secure suitable land near the University’s Minneapolis campus for an agricultural college and experimental farm.

Regent John Pillsbury, who held title to a piece of land east of the University, sold the land to the University for his cost. The land straddled University Avenue starting at Oak Street and continued east to the foot of the hill in Prospect Park. The land was sandy and swampy and little of it was suitable for farming. In 1873, President William Watts Folwell, the University’s first president, reported, “So far as I am aware, not a single young man has come to the University desirous to learn the science of farming.” Historian James Gray indicated that “on that arid soil of the University farm, nothing was sown but dissension and nothing reaped but problems.”

In 1882, a new farm was purchased four miles east of the Minneapolis campus—155 acres for $200 per acre. The old farm had cost $8,500 and was sold for $150,000. The proceeds were used to buy the new farm for $59,000 and paid for at least four buildings: a farmhouse, a main barn, an experimental station building, and the home building for the School of Agriculture.

More than 110 years later, thousands of students have come to study at the College of Agricultural, Food, and Environmental Sciences (COAFES). The stature of the college and its programs has attracted an excellent faculty and student body. It is consistently ranked among the top colleges of agriculture in the U.S. In 1995-96, more than 900 students were enrolled in undergraduate programs. The student body has a near equal split of women and men. And while some students come to learn the science of farming, the college’s majors represent a broad spectrum of programs in the applied sciences of soil, plant, animal, food and environment, education, communication, business and the social sciences.

The college is on the St. Paul campus. It shares the 700-acre campus with the colleges of Human Ecology, Natural Resources, Biological Sciences, and Veterinary Medicine. The Minnesota Agricultural Experiment Station borders the campus and supports a comprehensive agricultural research program. The Experiment Station provides a sizable teaching laboratory for undergraduate and graduate education. The campus also is home to the Minnesota Extension Service.

As a part of the University of Minnesota, COAFES is fully committed to its Land Grant mission of teaching, research and service to the citizens of Minnesota, the U.S. and the world. The college’s reputation and influence stretch around the world through the work of both faculty and alumni.

...Look Forward

As a current or prospective undergraduate student, you will have access to the college’s traditions and resources through the classroom and laboratory as well as through your faculty adviser. The college has a strong commitment to undergraduate education. In 1987, the faculty articulated that commitment in the following mission statement: “The goal of the College of Agricultural, Food, and Environmental Sciences is to provide students with varied educational experiences and an environment that promotes professional competence, the capacity to attain career success in agriculture, including food or related professions, and a sense of social responsibility.”

To help achieve this goal, the faculty of COAFES identified 14 objectives that students should accomplish while earning a degree in the college. These objectives are designated as learner outcomes. The establishment of the learner outcomes was the result of a joint effort by faculty, employers, and students. Employers were consulted to determine the skills they seek in recruiting COAFES graduates for positions in their companies or organizations. The curricula of the college have tried to ensure that students are able to meet these outcomes. Your COAFES education will provide you with skills needed to be an effective, responsible citizen in your workplace and community, because as a graduate of COAFES you should be able to:

- Demonstrate fundamental knowledge in the biological and physical sciences.
- Communicate effectively and use communication technologies.
- Evaluate and integrate diverse viewpoints or data.
- Make responsible judgments about management of natural resources and the environment.
- Make responsible judgments on ethical and policy issues.
- Apply global perspectives to agricultural, food, and environmental issues and decisions.

• Apply an historical perspective to the role of science and technology.
• Retrieve, analyze, and use information.
• Manage human resources and provide leadership.
• Appreciate and interpret literature and the arts.
• Solve problems in a profession.
• Demonstrate specialized expertise in at least one collegiate major.
• Develop breadth of knowledge in additional areas.
• Work effectively as a team member.

...Be Advised

COAFES is proud of the academic advising available to students. Perhaps no other relationship that students develop with faculty on the campus can be as positive as the advising relationship. Advisers can provide guidance and insight, advice and counsel, as well as challenge and support for students. The faculty of COAFES is committed to providing quality advising support for students. To accomplish that goal, almost all advising is handled by the regular faculty. COAFES is unique in that advisers have all volunteered to advise undergraduates and have gone through training to familiarize themselves with the curriculum as well as University policies and resources.

New students in COAFES are assigned an academic adviser. Your adviser will be able to help guide you through your major curriculum requirements, assist you with course selection, provide references for scholarships and employment, supervise internships, provide advice and counsel, and listen to your questions and concerns during your stay in the college. While we are committed to helping you make your way through your program in the most efficient way possible, we know there are many other opportunities available at the University of Minnesota. Your adviser will be able to provide you with information about some of those opportunities. He or she can be a valuable link in making the connections you need to take full advantage of the resources available to you on the campus and in the community.

You may change advisers if your interests or career goals change. Most students prefer to have an adviser whose specialty matches their interests. You should consult your major coordinator or the COAFES Student Services Office for information or can make an appropriate referral.

What can you do to make your advising appointments more productive? Read this bulletin and become familiar with the basic requirements and core courses of your major.

Be aware of important dates on the academic calendar. The COAFES Student Services Office publishes a quarterly update of important deadlines and other pieces of information in a newsletter called KIOSK. The newsletter is available in 120 Biosystems and Agricultural Engineering or you may visit the Student Services link on the COAFES World Wide Web home page at http://www.agri.umn.edu. Dates for changing your grade base, dropping and adding, late withdrawal and graduation application deadlines are important, and most require some assistance from your adviser. Know what they are and try to avoid waiting until the last minute to act on them. You will also find important registration information at the World Wide Web site of the Office of the Registrar at http://www.umn.edu/registrar/.

Make an appointment in advance of your registration date. Most advisers don’t do their best advising when they are in the hallway, rushing off to class being pursued by a student who just needs to have a signature on their course registration. Faculty are busy with teaching, research, outreach, and even have other advising responsibilities. Call a couple days ahead or stop by their office to set up an appointment. If you can’t make your scheduled appointment, call to cancel and reschedule.

Go to sessions prepared. Make a list of courses that you know you need to take or are considering for the next quarter. Update your program sheet if you are keeping one to include all courses you have finished. Write down your questions ahead of time so you get them answered. Use your session to review your course list or to ask about other courses. Your adviser will be willing to suggest another course to meet your program requirements, but probably won’t be excited about helping you look for “something I can fit in at 11 a.m.”

Don’t be afraid to ask for your adviser’s opinion or advice on your program of study, internships, or career plans. Their knowledge of the curriculum, the campus, and world of work can be valuable to you. Tap that resource.

What can you expect from your adviser? Your adviser will have office hours. They will change quarterly as teaching schedules change. Some faculty post their office hours on their door or you can call to find out what they are.

Your adviser will know the curriculum of your major. She/he will also have a working knowledge of most of the courses that are required. Most advisers also know some of the basic requirements about other majors or programs and can help you consider other options if your interests change.

Advisers can also assist students with petitions when it is appropriate to request a variation from specific program requirements.

Your adviser will have a record of your work. Most advisers have advising files for the students assigned to them. They get regular transcript updates of your work from the COAFES office. He or she will be familiar with services and resources around the campus. They are not likely to know every detail about every program or service, but most undergraduate advisers know how to find information or can make an appropriate referral.

Your adviser could be a source for a letter of recommendation for a scholarship, job or graduate school application.

...Find Committed Teachers

In June 1994, COAFES faculty adopted the following teaching philosophy: “The College of Agricultural, Food, and Environmental Sciences at
the University of Minnesota firmly believes that an educated public, constantly increasing its knowledge, is absolutely essential for sustaining a healthy environment and safe food supply.

To establish and foster excellent teaching, faculty in the COAFES make these commitments:

• Teaching is our primary responsibility.
• Quality research is essential for excellent teaching—just as quality teaching is essential for quality research.
• Undergraduate and graduate education are of equal importance.
• Excellence in teaching is recognized in performance evaluation.
• Interdisciplinary and interdepartmental teaching is encouraged.
• Personalized communication between students and faculty is essential.
• Creative and innovative teaching is valued.

...Succeed
What does it take to succeed? It takes hard work. You may feel that you have heard that comment so often that it has become cliché. However, academic programs in the COAFES are demanding. The University of Minnesota and the COAFES attract excellent students. Those students make for keen competition in classes. The combination of demanding course material and strong class competition will stretch your abilities. The faculty of the college and the University have high expectations of students in their classrooms. Professors expect that students are spending time outside of class reading and completing class assignments. The well-worn adage of spending two hours of study or preparation for every hour of class time is still valid.

Get to know your instructors or teaching assistants. All have office hours and are available to help outside of regular class hours. Some may ask that you call for an appointment, while others are available for walk-ins. Most professors will list their office hours or will provide information for reaching them outside of class on the course syllabus they distribute at the beginning of the quarter. If you are having trouble with a class, get help early.

Form a study group in your classes. It is a great way to make new friends and be more efficient in studying and learning. Check with other students in your class, roommates, or acquaintances in your residence hall or where you live to see if they would be interested in forming a study group. Members of a study group can often help one another with problems or difficult concepts.

Learn about the resources available to you on the campus. The University is a big place, but that size brings with it resources. Several departments and service offices have tutors available for students who are seeking help. There are also service areas and offices that will help students with the development of study skills or time management skills. It is often some of the best students who figure out how to access that help.

Keep your priorities in order. Many students have jobs. Keeping jobs and school in balance is often a challenge. If you work more hours, you may have to cut back on the number of class hours you carry. If you want to carry a full class schedule, then you need to keep your number of work hours down. For most students carrying a full-time course load, 15-20 hours of work a week should be the maximum.

...Get Started
All new COAFES students, whether entering freshmen or transfer students, are mailed an invitation to an orientation-registration program. At this program, in addition to becoming acquainted with the campus, students receive general information about the college and the University, and have an opportunity to meet with a faculty adviser in the academic area they have chosen. Advisers help students select and register for courses.

Registration—Registration is done quarterly, and students have the option of early registration. Early registration normally begins about the eighth week of the quarter for the following quarter. All students have the option of doing on-line registration from any computer that can be linked to the University’s public access information system. That system is available through University student computer labs or can be accessed via modem from students’ homes. Registration will also continue to be available in the Office of the Registrar, 130 Coffey Hall.

The Class Schedule is available each quarter in the University bookstores. The Class Schedule lists University day school courses throughout the University of Minnesota complete with hours, rooms, instructors, prerequisites, registration instructions, fees, maps, final exam schedules, grading definitions, and other valuable information. The Office of the Registrar also has a great deal of information, plus special registration tools available electronically at http://www.umn.edu/registrar/ on the World Wide Web. Students should also check with the COAFES office for other registration materials that are specific to the College of Agricultural, Food, and Environmental Sciences.

Evening and summer courses are featured in the Extension Classes Bulletin and Summer Session Bulletin, respectively. Separate bulletins are also published for other University colleges. Most can be obtained from the Office of the Registrar, 130 Coffey Hall.

Majors—As you look at the list of majors for COAFES they may appear different from what you expected. They may not match the language or titles that you have heard from other sources. The college’s 10 majors represent a bold new way of approaching education for agriculture. The majors, all of them interdisciplinary, incorporate teaching resources from many academic departments, and offer you the broad base of knowledge you will need for the dynamic future of agriculture. You will find a matrix listing general interests and occupations with corresponding majors and primary COAFES departments on the following page. Detailed information about each follows in the next sections of this bulletin.
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