

2002-03 Assessment Report

College of Agricultural and Life Sciences

Prepared by Assistant Dean Robert O. Ray
Based on Reports from Departments
November 21, 2003

In June of 1998 Departments in the College of Agricultural and Life Sciences submitted plans for the assessment of student learning outcomes. In addition three new program assessment plans were created in this last year. I am pleased to say that all Departments have now developed and implemented plans but with variability in both approach and result. As in the creation of the plans, the degree of success and progress is greatly influenced by previous experience in assessment, financial and staffing resources, and other context driven conditions. The departments are continuing to refine plans and to learn about assessment activities as they move forward. Each department has developed plans consistent with their abilities, interests and resources and all understand that assessment is an important part of continuous improvement in their academic activities. In the next year, each Department and program will review its original plan and submit a revision by the middle of Spring Semester 2004.

THE COLLEGE PLAN

The Assessment Plan for the College of Agricultural and Life Sciences was developed by a special faculty committee composed of the chairs of all the faculty committees dealing with undergraduate or graduate education in the College. Both the faculty Curriculum Committee and the faculty Academic Planning Council approved the Plan.

The CALS Assessment Plan calls for each department to: (1) identify the knowledge and skills its students should acquire; (2) develop a mechanism to measure the extent to which this knowledge and skill has been acquired; and (3) use the information to make appropriate changes to improve student learning. This assessment process is identical for both undergraduate and graduate education.

THE COLLEGE STRATEGY

The College faculty deliberately adopted a “bottom-up” strategy for the planning and implementing of assessment. First, department plans are developed exclusively by department faculty members. The great advantages of this strategy are: (1) the plans are very well adapted to the goals of the department’s academic program; (2) the plans tend to be highly thoughtful and reflective of the department’s philosophy; (3) once a plan is developed there is a very high probability that the plan will be implemented. The disadvantages of this “bottom-up” approach are largely due to the individualistic nature of departmental responses: (1) variations in the speed of adoption of assessment activity; (2) variations in the specificity of statements of knowledge and skill outcomes; (3)

variations in the level of analytical power of the measurement system; (4) uneven amounts of faculty time and departmental attention devoted to assessment in general.

The second principle of the College's strategy is that assessment activity should be supported by the resources available in the department. The assessment plan is a "local" plan, produced and implemented by department faculty, even though the use of external resources might produce more elegant analyses. In general, this "local control" of assessment implementation means that the activity is not as extensive, and the approach is not as scientifically or statistically rigorous, as an approach that uses external resources to design and implement detailed assessment studies. On the other hand, the activities are thoughtful and are targeted on issues the faculty believes are important. Most important, the assessment activity is sustainable over time by resources that are under the control of the faculty in the department. Assessment is not dependent on external resources that cannot be sustained in the future. Again, one consequence of the reliance on "local" resources is variation in the level of assessment activity by department.

Implicitly, the College implementation strategy accepts the variation in the plans and implementation activity as a reasonable price to pay for a set of plans that are well-suited to the department's program, implemented by departmental faculty, likely to produce results that the faculty in the department will use, and likely to be sustainable over the long run.

SUMMARY OF 2002-03 ACTIVITIES

The Office of Academic and Student Affairs received funding in 2001 from the Campus Assessment Council to design and implement an assessment of academic advising in the College. The College ASA staff worked with the Wisconsin Survey Research Center and in the Spring Semester of 2002 conducted the survey of student and faculty satisfactions, expectations and outcomes with advising in the College. Analyses were begun in the Summer of 2002 and continued through the Spring semester of 2003. The results were shared with each Department in individual reports to Department Chairs and conversations between faculty members in those departments and the Dean's office staff. These conversations focused on strengths and concerns revealed by responses from both students and faculty. Further, presentations on the study and its results were presented at major conferences on research in advising. 1) Expectation and Experience in Academic Advising: Predictors of Student and Advisor Satisfaction. A paper presented at the NACADA Midwest Region V & VI Conference March 23, 2003. Madison, Wisconsin. 2) Determinants of Student Satisfaction with Academic Advising in the College of Agricultural and Life Sciences. A Paper presented at the summer workshop of the Academic Programs Section, Board on Agriculture, National Association of State Universities and Land Grant Colleges, Champaign, Illinois, July 29, 2003. Further work on Research reporting and publication continues.

In the last year, Departments pursued their plans in varied ways and with varied outcomes. In addition to the ongoing activities of evaluation at the Department level, several special projects were approved and received funding for 2003. The Center for Molecular and Environmental Toxicology and the Biology Major received funding to support planning for the development of assessment plans. The Biology Major

completed work on its initial plan and the Center is continuing to make progress. Additionally, the Department of Horticulture has refined and implemented an assessment plan which was not filed in the original college Plan.

In the following section, the assessment activities of College Departments are presented. Each enumerated response is related to the four categories Departments were asked to examine: 1) A description of progress made in implementing assessment plans at the undergraduate and graduate level during the past year. 2) A brief description of the processes you have developed to use the assessment information to make changes in the major. 3) A brief description of any specific changes made as a result of assessment this past year. 4) A brief description of assessment plans for the 2001-2001 year.

While all Departments report continued progress and attention, some have been able to dedicate more energy to the process than others. There are a number of reasons for this. A number of Departments are preparing for external reviews by professional agencies or peer review mandated by external bodies. Others have been involved with curriculum revision and new program development.

DEPARTMENTAL ACTIVITIES

Agricultural and Applied Economics

Graduate Program

The Agricultural & Applied Economics Graduate Committee continued its established assessment strategies, which have been reported in previous years. Following the committee's comprehensive review of the graduate program in fall 2001, we continued to work on recommendations stemming from that process. Committee members developed the content and structure for a new pedagogy course as well as an additional semester of microeconomic theory; however, we currently lack the faculty resources to offer these courses. The committee also spent considerable time working out a plan to cover our current course commitments in light of diminishing faculty numbers. We made a few minor curriculum changes, and as usual have appreciated input from our graduate students in that area.

Undergraduate Program

As a part of its regular business, the Undergraduate Committee (UC) of the Department of Agricultural and Applied Economics (AAE) continually assesses the curriculum and academic programs intended to meet the educational needs of students within the Department and across CALS and the University. Each year the UC makes minor revisions in the requirements for the AAE major and attempts to identify possible gaps in the AAE undergraduate program.

Two specific changes were made as a result of our ongoing assessment process this past year. For many years, we have offered our capstone course only once a year. We have also been trying to include some significant quantitative methods training within the capstone course. Beginning in 2003-2004, we will offer the capstone course every semester as AAE 500. In addition, we will restore the quantitative methods emphasis in

our program through a revised and reinvigorated senior level quantitative methods course.

Agronomy

1. Our capstone course is designed for student assessment. It is a 2 credit course with the following requirements: write a 20 page status report on a topic that is central to the future of agriculture, make an oral presentation (20 min) on the report, participate in discussions on issues that are pertinent to the future of agronomy and agriculture take a survey exam that covers general topics in agronomy, and discuss their experiences as students in agronomy (to include advising and course content).

2. Any perceived weaknesses are discussed by the departmental curriculum committee and/or the faculty as a whole.

3. We now have developed a strategy for freshman orientation.

4. We will proceed as outlined above.

Animal Sciences

1. Met with students, all Seniors, enrolled in AS 435, Animal Sciences Proseminar, on October 10, 2002. Students mentioned strengths and weaknesses of the Animal Science program. Strengths: advisors, wet labs with hands-on experience, and personableness of faculty. Weaknesses: do more training of advisors, any opportunities for tutoring by grad students or peer mentoring for undergrads?, is the genetics prerequisite for AS 360 necessary? (Poor commentary for Genetics 466); confusing Communications A and B requirements; why are CALS requirements unlike L&S?

2. Exit interviews by Chair: 13 in December 2002, and 14 in May 2003. Stimulating criticisms were: a mandatory internship would be beneficial, advisors should discuss career goals of advisees, Production Systems option is weak, large gap in animal science curriculum between AS 101 and Junior year coursework, more companion animal and equine courses? Several Seniors have discouraged the Department from combining animal production courses.

3. New course offerings in Spring 2003: AS 375, Human/Animal Symbioses (AS 101 prereq, Soph level course), 1 cr., Mark Cook; Symbioses Lab, 1 cr., Terry Jobsis; AS 375, Career Orientation in Animal and Poultry Sciences, 1 cr., Dan Schaefer

4. Information received from undergraduate students has been considered by the animal genetics faculty. New course offerings, i.e., AS 361, 362 and 363, will be initiated in Spring 2004.

5. Undergraduate Committee has asked Chair to visit all undergrad courses once per year. Courses visited this past academic year were as follows: AS 250, 305, 375 (Equine Repro), 360, 430, 432, and 434. Chair's conclusion: "This is a neat major!"

6. Undergraduate exit interviews will continue.

7. New subcommittee structure for Graduate Committee was approved at May 19, 2003 Faculty-Staff meeting.

8. The Animal Sciences Graduate Program is currently undergoing substantial revision. Changes are being implemented based in part on comments from the 2001 CSREES review report, on faculty/staff discussions, and on graduate student input. The organization of the Graduate Committee has been revised with two standing subcommittees, Academic and Admissions. The revised structure will facilitate, among other things, a review of current graduate courses and course requirements, a review of teaching requirements, development of student certifications, and an evaluation of preliminary examination requirements. The Graduate Student Policy Document is being updated and methods to provide better co-ordination of departmental sub-group activities are being discussed. Current admissions policy and requirements are being reviewed and possible recruitment activities and rotator programs are being considered for implementation.

Bacteriology

1. Progress made in implementing assessment plans at the undergraduate and graduate level during the past year.

The department is executing its assessment as proposed in its initial plan.

2. The processes you have developed to use the assessment information to make changes in the major.

The Curriculum Committee solicited feedback from current doctoral students and recent doctoral graduates in considering the success of the graduate curriculum.

3. Any specific changes made as the result of assessment this past year.

There is continual alteration by instructors of based on course surveys, but no department-wide changes have been implemented. Discussion with both undergraduates and employers has suggested that we could enhance our undergraduate seminar with more career exploration information, but this has not yet been implemented.

4. Assessment plans for the 2003-2004 year.

We will continue following our initial plan and to adjust to the evolving needs of the relatively new Microbiology Ph.D. program. As mentioned above, a current focus of the Curriculum committee is assessing the success of our graduate-level courses. We also expect to re-analyze the requirements and outcome of the Bacteriology M.S. program, which was not affected by the replacement of the Bacteriology Ph.D. program by the Microbiology Ph.D. program.

Biochemistry

1. Graduating seniors are sent reminders in late November via email to fill out the web based evaluations regarding courses, advising, and careers. The 2003-2004 will be the first year of web based evaluations. Prior years were done by email with a 25% return rate.
2. The Department Undergraduate Committee which includes representatives of the faculty, Mr. Dan Barnish (Academic Staff Undergraduate Student Services Coordinator) and a representative of the Undergraduate Biochemistry Student Organization (UBSO) continue to analyze each years assessments. The assessments have reflected that Department of Biochemistry has been improving in the areas of advising.
3. Several changes have been made in response to the initial 2000 assessment. First, the Department created an academic staff position for coordinating undergraduate affairs and hired Mr. Dan Barnish to fill this position. Mr. Barnish coordinates registration of majors, assigns them to faculty advisors, resolves faculty advising problems, advises incoming and transfer students, has developed a web site for career information and research positions, and advises students at SOAR or other on campus events. Second, the Department undergraduate committee has been holding a "career day" information session in the spring semester during Biochemistry 501 and 508 courses. UBSO along with Mr. Barnish have also been hosting a variety of biochemistry career speakers and informational sessions about internships throughout the year.
4. During the year 2003-2004 we plan to continue carrying out an exit survey with all seniors. The Department of Biochemistry is also considering exit interview with every senior to ensure 100% response and to integrate a test in Biochemistry 511 to measure the knowledge base of biochemistry students.

Biological Systems Engineering

The Biological Systems Assessment of graduate and undergraduate programs involves many levels of assessment including focus group meetings, undergraduate student exit evaluations, department advisory committee and CSREES review (April, 2003). The focus groups consisted of senior and junior practicing engineers, faculty from other universities and graduate and undergraduate students. Three focus groups, machinery systems, natural resources and environment and food engineering have met. The food engineering faculty from BSE and Food Science has been meeting monthly to evaluate the Food and Bioprocess Engineering Option and needs for new courses with the addition of a new member of the faculty.

Progress during the past year includes:

1. Changed the name of the graduate and undergraduate degrees from Agricultural Engineering to Biological Systems Engineering, the current name of the department (focus groups recommendations) and
2. Increased involvement in the College of Engineering (student and faculty request)
 - a. Cross listing of two BSE courses (BSE 475 and 476) in Mechanical Engineering (taught by BSE faculty)
 - b. Listing BSE undergraduate degree on the COE web as a program in COE
 - c. Provide BSE information in COE SOAR materials

Assessment plans for 2003-04 include a focus group meeting in the Facilities Management Area (Structural Systems) and exit evaluations by students graduating in 2003-04. BSE will be developing a response to the CSREES review team recommendations. In addition, a new course (BSE 441) is being proposed and will be cross listed with Mechanical Engineering.

Biology Major

1. Progress made in implementing assessment plans at the undergraduate and graduate level during the past year.

The Biology Major is an undergraduate program. During the past year, the Biology Major developed its first assessment plan. Development of the plan involved focus groups with faculty advisors; surveys of students and faculty advisors; and portions of Executive Committee meetings dedicated to assessment plan development. The plan was adopted at the end of the spring, 2003 semester and implementation began in September 2003.

2. The processes you have developed to use the assessment information to make changes in the major.

Assessment information will be reviewed by a subset of our Executive Committee, and reports and recommendations will be presented to the entire Executive Committee for consideration.

3. Any specific changes made as the result of assessment this past year.

Not applicable because plan wasn't implemented yet.

4. Assessment plans for the 2003-2004 year.

During the 2003-2004 year we will continue with our e-mail survey of graduating seniors. We will also complete an analysis of courses taken by graduating seniors to determine how well we meet our objectives of "Provide a broad background of knowledge and experience in the biological sciences" and "Provide students with a vigorous yet broad educational foundation typical of a liberal arts program". Results of this analysis may be used to make curricular changes. We will continue our efforts to determine how many students transfer out of the major, their new majors, and their academic performance before and after transferring. Finally, we will develop a web-based midterm survey for all students in the major. This survey will focus on the quality of advising.

Dairy Science

We continue to implement our assessment plan with the exception of the mail survey of recent graduates. Our assessment consists of the following primary functions:

All individual courses in short course and undergraduate program fill out a common course evaluation. The course evaluation has been significantly modified and the modified form was used uniformly this past year. The new questionnaire focuses more on students assessment of what they learned as opposed to the earlier formed which focused more on the lecturing and teaching skill of the instructor.

All undergraduate seniors are invited to have an exit interview with the Chair. There is a very high compliance with this request. Notes of each oral, one on one interview are kept and discussed at curriculum committee meetings and faculty meetings when relevant.

Two required capstone courses are used to evaluate students knowledge and skill levels. These include the senior seminar taught by the chair and the upper level dairy management practicum team taught by several faculty.

Finally we did one mail assessment of recent graduates. That assessment tool was to be repeated on a three-year basis. It has not been repeated largely due to decreases in office staffing and funding for the mailing. The curriculum committee will reevaluate the value of this practice and examine how frequently it should be done, if it is to be continued.

Entomology

1. Our goals are to 1) enhance observational skills, 2) develop critical thinking skills, 3) learn how to collect data systematically, 4) learn how to analyze data, 5) learn how to extract useful information from data banks, 6) learn how to integrate one's own information into the overall literature on the subject and 7) learn how to present data in an oral presentation. We assess progress towards these goals by monitoring student talks, research papers, quizzes, and written and oral exams. Graduate students are now required to present exit seminars to the department as a whole, rather than to the limited faculty who serve as committee members. These assessments are fully in place.

We also planned to assess undergraduate progress with exit interviews. The exit survey is designed to determine whether students feel that their biological training has adequately prepared them for future experiences and which of their courses were most important to their academic growth. The exit questionnaires have been distributed twice, through one faculty member who serves as our primary advisor to undergraduates. We are preparing to expand distribution by recruiting additional faculty advisors. We have not yet implemented exit interviews with graduate students.

Assessment of our graduate program also is facilitated on an ongoing basis by inclusion of graduate representation on all non-personnel related departmental committees. Graduate students are fully involved in departmental reviews and retreats and have made substantial suggestions for revision of the curriculum.

2. The department's academic affairs committee was charged with reading and acting on the exit interviews for undergraduates. This has not yet occurred.

3. In general, exit interviews have indicated satisfaction with the major. Small changes in individual classes have been implemented as a result of these interviews and of the input from graduate representatives. For example, we now offer limited laboratory experiences in our insect physiology course. We are also in the process of redesigning

our upper level seminar series (Ent. 901, 903, 905), as a result of discussions with the graduate students.

4. We intend to follow up on our original plan to have Academic Affairs review the exit interviews. Based on the success of these interviews, we also intend to implement similar interviews with our graduate students. The departmental chair and the chair of academic affairs will conduct exit interviews. Academic Affairs will review results.

Food Science

The Department of Food Science, through its Curriculum Committee, is currently in the process of deciding how and to what degree its curriculum should be revised. Therefore, the focus of curricular development has centered more on course content and sequencing rather than on assessment strategies. The department did however make some progress in implementation and design of its assessment processes. The following is a summary of progress made on previously established assessment activities and the Department's assessment plans for academic year 2003-2004.

1. **Progress made in implementing assessment plans at the undergraduate and graduate levels during the past year.** The Department of Food Science continued with its assessment plan as delineated in the CALS 2001-2002 Assessment Report. The Food Engineering Program Industry Advisory Group was accessed to provide feedback on skills of graduates.
2. **Processes developed by the Department to use assessment information to make changes in the major.** All information generated from assessment activities is forwarded to the curriculum committee. The Committee, in turn, uses the information to evaluate courses and recommend change content.
3. **Specific changes made as a result of assessment over the past year.**
 - a. Committee has proposed that the prerequisite of FS 310 (Analysis of Food) be dropped from FS 410 Food Chemistry. Content assessment revealed that FS 410 offers the same level of challenge to the students without the prerequisite. This change also clears the way to allow students in the dietetics program to take FS 410 as requested by the Department of Nutritional Sciences. Assessment analysis shows Dietetics students to have similar performance records as Food Science majors in foundation courses.
 - b. Staffing of Food engineering courses has been adjusted to match programming needs with personnel expertise
4. **Assessment Plans for 2003-2004**
 - a. The Department will host a faculty retreat on curriculum revisions in 2004. This, in turn, will be followed by the development of outcomes and assessment strategies as appropriate.
 - b. The Department plans to use the assessment plan developed for Food Processing and Food Engineering as a model for departmental assessment plans

- c. The Department will seek feedback on its assessment activities from the Babcock Associates during the annual meeting in February

Forest Ecology and Management

1. We continued to conduct exit interviews during 2002-03 with both undergraduate and graduate students for use in curriculum assessment, as well as identification of faculty and staff for various mentoring awards. Responses from undergraduate interviews completed during 2002-03 indicated a very high degree of satisfaction with career preparation. The most recent interviews (May, 2003) had very high ratings (mean score of 4.26 on a 0-5 scale). Student exit interviews have identified one or two new assistant professors as valuable teaching resources. Our 'capstone course' intended as an integrative experience for seniors has continued to provide valuable information on student preparedness.

2. In response to student demand, and as a perceived opportunity for UW-Madison undergraduates, the Curriculum Committee created a new 'track' (Forest Ecosystem Management) within the Forest Science curriculum. This new option complements the existing options in Forest Management and Natural Resource Conservation and Management. The new option was made available beginning September 2002.

3. The department completed a 'self assessment' of our undergraduate program for the Society of American Foresters, our professional accreditation organization. Much of the information contained here focused on undergraduate preparedness and employment of alumni. This was a 5-year update so no site visit was made by SAF. Our program was re-accredited for the period 2002-2007.

4. At the graduate level, we have instituted changes in how we evaluate candidates for admission in response to changes made in the administration of Graduate Record Exams and well as to the shift in orientation of many applicants to ecological and environmental areas. A new subcommittee of our graduate faculty is providing more timely evaluations of applicants, as well as processing of more nominations for fellowships and other competitive awards.

Genetics

Graduate Program:

Assessment of the doctoral program in Genetics is ongoing. The program holds at least annual Town Meetings of all genetics graduate students and faculty trainers. As a result of these meetings, the program has undergone changes in requirements as well as changes in course offerings and curricula. All genetics graduate students take a comprehensive written prelim exam in genetics during their second year of study. The oral prelim based on the thesis research project is taken during the third year of study. Annual mandatory committee meetings of our dissertators assess progress towards the PhD degree. Our program is funded by an NIH training grant, and we are evaluated for progress yearly, with a comprehensive review every five years.

Undergraduate Program:

Based on undergraduate feedback and our Department review, we have made improvements in advising and career counseling of our undergraduates. Our Undergraduate Curriculum Committee reviews all major course requirements, and updated our major requirements beginning in Fall 2001. Our assessment process is ongoing and the Curriculum Committee plans to develop a questionnaire to survey our senior majors during Spring 2004. The Department sent a newsletter to all of our alumni late Summer 2003. We plan to keep in touch with our graduates at least annually. The Undergraduate Genetics Association, formed in 1999, continues to provide a vigorous program for all of our majors, including research and scholastic enrichment.

Horticulture

Many horticulture programs at public universities have suffered from departmental mergers and college reorganizations during the past 10 years. This has made it difficult to obtain a 4-year degree in horticulture at some institutions. The Department of Horticulture at the University of Wisconsin-Madison is proud to have maintained its strength in horticultural research, teaching, and extension during this period and continues to offer a high quality undergraduate program that spans horticultural disciplines and practices. Our students choose from courses in a variety of areas, including basic sciences such as genetics, chemistry, biochemistry, and biology, horticultural disciplines including plant propagation, turf, fruit, and vegetable crops, landscape plants and greenhouse production, and related courses in plant physiology, plant nutrition, entomology, plant pathology, and weed science. Many of our undergraduate students complete internships in horticultural industries or in the public sector, and many work in horticultural jobs during their undergraduate education. A significant number of our undergraduate students complement their education by working at campus horticulture facilities, including the D.C. Smith Instructional Greenhouse, the Allen Centennial Garden, the Walnut Street Greenhouse, and the University of Wisconsin Arboretum. Horticulture undergraduates also work in laboratories on campus, including many research programs in the Department of Horticulture.

The Department of Horticulture has a total of 77 undergraduate horticulture majors. These students are rather evenly distributed across four degree programs, including 23 students in Natural Resources, 15 students in Natural Science, 15 students in Agricultural Science (Production), 14 students in Agricultural Science (Business), and 10 students in International Agriculture and Natural Resources.

The Department of Horticulture has only recently developed an assessment plan. The details of the plan are listed below. A primary feedback mechanism for bringing information gained from assessment back into the department will be through the Department's Curriculum Committee. All graduating seniors will be interviewed one-on-one and students in the Department's Capstone course will each have an opportunity to discuss future directions with the Department Chair and the Curriculum Committee.

1. Students in the Capstone (Horticulture 410) course will work on a design project in teams for one of their sessions. The topic could be to "design an

ideal horticulture department” or analyze a specific problem in current horticulture, such as the role of the horticulturist in mediating the debate between the future of conventional and organic agriculture. Excerpts from these projects will be presented to faculty at a faculty meeting or faculty retreat.

2. All students in the Horticulture 410 Capstone course will participate in a discussion during one of their spring sessions. The Department Chair and members of the Curriculum Committee will be invited to attend. The students will be engaged in a dialogue regarding their assessment of the strengths, weaknesses, and opportunities of their major. A document will be prepared summarizing their comments for distribution to the Department.
3. The Department Chair or Curriculum Committee Chair or their designate will conduct one-on-one senior exit interviews during the semester in which students are graduating. .
4. Retrospective interviews will be conducted via email with graduates 3-5 years post graduation.
5. A form will be developed for asking specific questions about learning that can be handed out at the time of course evaluations. This form would be mechanically graded. The results will be summarized by the curriculum committee chair for distribution. Responsibility for the development of this form rests with the curriculum committee.

Landscape Architecture

Undergraduate

The Undergraduate Committee in the Department of Landscape Architecture is responsible for evaluating and implementing both its professionally accredited program and natural resources program. Since the professional program is nationally accredited, the vast majority of students pursue this option. Because of high student demand, access into the program is competitive. After students have taken six pre-requisite courses during their first year (PLA) in the Department, their GPAs are evaluated (letters-of-intent are also required). Twenty students are then selected to enter the advanced program (ALA), which is three additional years in duration.

The undergraduate program is constantly being evaluated to determine if it is meeting the changing needs of society and the profession. In addition to departmental reviews, an evaluation of the Department was conducted, in November 1991, by a national three-member team appointed by the American Society of Landscape Architects. This review, which has occurred every five years since the time of the Department’s founding in 1964, evaluated the program to assess its strengths and weaknesses, and to determine whether or not it should be accredited for another period. In February the review of the visiting team was forwarded to the Department by the national accrediting board. The review proved to be one of the most positive evaluations the Department has received over the past three decades, and revealed no significant weaknesses in its program. In February, the Department was informed that it was included in an initial, small group of North American landscape architecture programs that received re-accreditation for six ensuing years.

In preparing the accreditation report the Department conducted an in-depth review of alumni who had graduated during the previous five years. Every effort possible was made to contact each of these alumni and have them respond to the assessment form, which gave special emphasis to their employment history, salaries, and their assessments of the success of the Department in preparing them for their careers. A similar questionnaire was also distributed to a smaller group of alumni who had graduated more than five years prior to 2001.

The Department's highly regarded capstone course, which covers both semesters of the senior year, serves as one of the primary means by which student progress and success are evaluated. The capstone requires each student to work with a client (often a community or public organization) to develop proposals and plans for a project that requires the perspective of a landscape architect. Other studios in the Department also include juries comprised of faculty and professionals who critique the students' work over each semester.

The Department receives assistance from a small group of CALS faculty, appointed by the Dean, who review the program in terms of its potential linkages with other departments, and who also serve as advocates for its programs and initiatives.

Each year the Department completes a report, issued by ASLA, which includes data on how the program has met its goals and objectives. As always, the Undergraduate Program Committee will continue its ongoing review of the Department's program in preparing for the 2002-03 academic year.

Graduate:

The Graduate Committee in the Department of Landscape Architecture is responsible for evaluating and implementing its Master's programs. During the past year the Graduate Program Bulletin, which provides information about the Department for prospective students, and also offers a road map of requirements and deadlines for enrolled students, was updated and revised.

Since each student is required to complete a research thesis prior to graduation, this document serves as one of the primary means by which student accomplishments are evaluated. In addition to the thesis, each student also presents his/her results to the Graduate Colloquium that is conducted each Fall Semester. Furthermore, the highest quality theses are selected by outside evaluators to receive graduate student awards distributed by the American Society of Landscape Architects.

Several of alumni who received graduate degrees from the Department, were included in the 2001 survey that was sent out as part of undergraduate program accreditation.

Additional refinements to the program will continue throughout the 2002-03 academic year.

Life Sciences Communication ('01)

1. The department has used class evaluations and discussions with students and potential employers about what is most needed.

2. The department curriculum committee discusses responses and suggests changes in current courses and potential new courses to the department's Executive Committee.
3. The department has added an experimental course, resurrected an old course (now much updated) and has significantly upgraded its video, radio and computer equipment.
4. The department will continue to monitor courses through student evaluations, student discussions and through discussions with potential employers.

Molecular and Environmental Toxicology Center

The process of restructuring the curriculum, which has been initiated, will entail the METC administration and the General Achievement and Curriculum Committee (GACC) considering whether the program's existing toxicological graduate training is compatible with its vision. Some questions to be considered are how visiting lecturers might be utilized in core courses, how to revise courses within the parameters of volunteer instruction, how to prepare students for the American Board of Toxicologists certification exam, and how to create flexibility for student studies. The May 2003 report of the METC External Advisory Committee will be used to determine how the curriculum and GACC vision fits the national cohort. The GACC will report to METC course instructors and students at an off-site location to refine the modifications and goals in March 2004. The METC will provide the Provost with a report in June 2004.

Nutritional Sciences/Dietetics

Undergraduate Program

1. As the dietetics programs are accredited/approved by The American Dietetic Association, specific assessment plans are ongoing. We have continued to implement these assessment plans which include: graduate surveys, alumni surveys, employer surveys, exit interviews with graduating seniors, course evaluations, and supervised practice director surveys. In addition, our plans include monitoring of: current student and graduate GPAs, passing rate on the national registration examination for dietitians, and supervised practice program placement. To improve academic advising, faculty received a "refresher course" – presented by CALS Academic Student Affairs – in best practices for advising undergraduate students. Exit interviews with B.S. Natural Sciences students were added to the assessment process this past year.
2. Assessment activities are scheduled throughout the year. Results are discussed in detail at meetings of the Dietetic Programs Committee. Recommendations for changes are implemented by this committee and/or sent to the Department of Nutritional Sciences Curriculum Committee/Faculty, as appropriate.

3. A comprehensive Program Assessment Report for the Didactic Program in Dietetics was submitted to The American Dietetic Association on March 1, 2003. This report summarized the results of all assessment activities completed over the past 5 years. As a result of this review, an additional assessment criteria/outcome measure was added. Upon enrollment in FS 437 (completed during the junior year), student names will be entered on a Program Completion Spreadsheet and individuals will be tracked through completion of the program or until withdrawal. The "Program Completion Rate" (number of students completing the program/number of students entering the program via FS 437) will be reviewed by the Dietetics Programs Committee on an annual basis to assess whether our goal of 75% retention has been achieved. If the completion rate is less than 75%, a plan of action to improve this rate will be developed.

As the Coordinated Program in Dietetics continues to be phased out, no new assessment plans for this program were developed.

4. We will continue with the same plans outlined in point 1, 2 and 3. In addition, the use of web based surveys for students, alumni, supervised practice program directors, and employers will be explored in 2003-2004.

Graduate Program

The Interdepartmental Graduate Program in Nutrition Sciences (IGPNS) is a campus-wide graduate training program that is administratively housed in the Department of Nutritional Sciences. The program benefits from ongoing assessment by the Department, Graduate School and the National Institutes of Health (NIH) through competition for training grants. The Department was awarded renewal of our NIH Nutrition Training Grant for 2003-2005, years 11-15. This 1.7 million dollar grant provides support for 4 pre-doctoral and 3 postdoctoral students. Renewal of the NIH Nutrition Training grant is competitive and provides evidence of the continued high quality of the IGPNS including ongoing program assessment. Tools to assess student and program outcomes include performance on qualifying examinations, number and quality of publications, years to degree completion, program completion rates, receipt of student research awards and job placement. The Graduate School awarded the Department increased funds for recruitment in 2003 based on a campus-wide competition that considers the quantity and quality of the applicant pool to IGPNS and the recruitment plan. The Department continues to refine and improve the orientation provided each fall to incoming graduate students to the IGPNS.

Plant Pathology

1. Progress made in implementing assessment plans at the undergraduate and graduate level during the past year.

We have developed 2 new courses, Teaching Biology and Special Topics to address the needs of both the undergraduate and graduate students in our department. We

feel both of these courses will strengthen our curriculum and assist students in getting information about the most recent advances in our discipline.

2. The processes developed to use the assessment information to make changes in the major.

We have developed mechanisms to get feedback from both undergraduate and graduate students in periodic "town hall sessions, where we get feedback on the curriculum and how we can tailor it to meet the needs of the students. These meetings will continue to be held on a yearly basis.

3. Any specific changes made as the result of assessment this past year.

Yes, see answers above. We have developed 2 new courses with a third course to be introduced in Spring 2005.

4. Assessment plans for the 2003-2004 year.

Submitted in previous document.

Rural Sociology

The Department of Rural Sociology continues to use the assessment methods described in the document below and will use the same plan this year. The only change is the implementation of a new plan for the capstone class that requires graduating students to complete a project in a capstone course and present the results in a seminar at the end of the semester.

1. The Department of Rural Sociology continues to implement the assessment program it established in 1997. The central mechanism by which the Department assesses educational outcomes is a systematic program of exit interviews of graduating seniors. For the past five years, the Chair of the department has taken responsibility for implementing these interviews, and we believe that they provide an intimate and personalized approach to gauging both student achievement and program efficacy. The interviews have explored students' views on the quality of their overall educational experience in the Department of Rural Sociology and solicited feedback on specific dimensions of that experience. A written summary of each interview and an evaluation of each student's achievements relative to the department's educational goals has been maintained.

2. The Instruction Committee analyzes the interview reports and is responsible for recommending any policy or program changes it deems necessary or appropriate.

3. In exit interviews, many graduating seniors expressed dissatisfaction with the structure of requirements associated with the departmental major. Specifically, they felt that the four thematic areas across which they were required to distribute their courses in Rural Sociology were not appropriate to their needs and interests. The Instruction Committee had for some time been aware that the four-fold structure of requirements was a legacy of earlier times and no longer fit well with either the state of the discipline or current course offerings. Accordingly, the Instruction Committee proposed a new structure for major requirements. Rather than requiring a particular distribution of courses, students are charged with consulting their faculty advisors in shaping a set of courses that both ensure an understanding of the scope of the discipline and also are

tailored to the needs and interests of the individual student. The Department adopted the new curricular structure.

4. The Department of Rural Sociology has found its exit interviews to be a valuable and effective means of gauging student achievement and of soliciting information that can be used to improve the educational programs of the department. The Department is also developing a set of options for the capstone experience that includes, but is not limited to, a capstone course.

Soil Sciences

The Department of Soil Science has collected a set of learning goals from faculty groups of each of its sub-disciplines and views progress toward these goals in the Capstone course. We continue to provide student evaluation of every course and every instructor; instructor scores are made available to the entire faculty as part of the annual merit review process, while the collected student comments are shared among the instructor, the Chair of the Instruction Committee, and the Department Chair as the basis for improvements, both personal and structural. External reviewers from peer institutions and the USDA periodically review the activity of the Department, including its curriculum and instruction. Alumni surveys have been conducted with the assistance of CALS and the Department regularly meets and reviews this data.

Earlier intentions to establish embedded questions in final exams of individual courses did not succeed because of the great diversity of examination styles. Discussion continues as to what use might be made of the Professional Soil Scientist Exam; noteworthy is the fact that half of the major's undergraduate students are production oriented, for whom the benefits of this professional certification are not immediately obvious, and also that the gross score on the exam will not allow focus on particular weaknesses.

For the past several years, MS and PhD examination committee members have completed written evaluations of the candidates, with particular emphasis on their proficiency in soil science, allied sciences, critical thinking, and expression. In Fall 2003, the Department began collecting an electronic portfolio of course syllabi, course exams, and grades to permit both lateral examination of curriculum breadth and longitudinal studies of depth. Similarly, the student performance in the Capstone is now to be retained electronically for periodic review of students' ability to integrate knowledge and problem solve.

Wildlife Ecology

1. In 2002-03, over 20 senior and grad student exit interviews were completed. Each interview included questions/discussion on curriculum, specific courses, and one-on-one mentor teaching. Written evaluations were completed in each of our 2 capstone classes. These 2 sets of data were considered with the feedback presented by our CSREES Department review team in 2002.

2. Results were presented to the faculty as a whole and to the Department Curriculum Committee.

3. As a result of student feedback, a major realignment of our teaching responsibilities began in fall 2003. A core, senior level class will be taught by a post-doc in the spring semester, and that course will then become the responsibility of a new faculty hire, once we are given permission to recruit. Our capstone classes are being realigned so that both are not offered in the same semester.

4. We plan to continue to rely on exit interviews and summary evaluations until we can build our faculty back to full strength.

Urban and Regional Planning

Master's Program

The department's Master's degree program in urban and regional planning is accredited by the Planning Accreditation Board (PAB). An extensive self-study is conducted prior to each on-site accreditation visit, which occurs every five years. Therefore, the program is regularly assessed by the faculty and by a three-person accreditation team. The last self-study and (successful) accreditation review occurred during the 2001-02 academic year. Other forms of assessment occur every year.

The department's Curriculum Committee takes the lead in reviewing and proposing revisions of our Master's curriculum. The faculty then reviews and acts on the Curriculum Committee's recommendations. Two years ago, for example, the faculty instituted a new International Development Planning concentration. This has quickly become a popular option with our incoming Master's students. Last year, the faculty considered a proposal to combine and redefine two other concentrations within the Master's program. These discussions among the faculty are continuing this year.

The department uses other routine assessment activities, as well. Student course and instructor evaluations, for example, are reviewed by the faculty member teaching the course, as a method for course improvement. These evaluations are also reviewed by the Faculty Evaluation Committee as part of the annual faculty performance evaluation, and by mentoring committees for strengthening the teaching of junior faculty.

The department also conducts student exit exams and interviews. Two faculty members conduct each exit exam. The student is examined on a substantive question or issue in urban and regional planning. For the exit interview, students write a critique of their experiences in the department. Student comments may focus on required courses, computing and physical facilities, advising, internships, or anything else that the student considers relevant. Students also fill out forms evaluating courses taken outside the department. These evaluations are kept on file and are available to other students who may want the information during registration.

Doctoral Program

The URPL doctoral program was evaluated, by a campus-level committee, simultaneously with the last re-accreditation review of our Master's program. Several of the committee's recommendations have been subsequently implemented by the faculty. These include the requirement of an annual performance review of each doctoral student. By May 1 of each academic year, each student is required to submit to the Ph.D. Program Committee a two-page statement on their accomplishments for the previous year and

their work plans for the upcoming year. The Committee provides written comments to the student and his/her major advisor.

Summary

Assessment is a high priority for the College of Agricultural and Life Sciences. Several committees in the College address the topic either directly or indirectly as part of their mandate. The Curriculum Committee of the college and most departments continually discuss refinements and improvements of curricula to enhance the preparation of College graduates. The Instructional Improvement Committee has a particular interest in instructional improvement throughout the college and the Office of Academic Student Affairs is persistent in seeking meaningful and useful learning experiences for students. Further, the Undergraduate Honors and Research Committee looks for ways to enhance the experiential learning base for students through mentored research activities.

Last year the Office of the Provost asked that all departments and programs take time to review, revise and resubmit their assessment plans. The Office of academic Affairs in the College asked each of its academic units to appoint an assessment chair for this exercise and a meeting of all contact persons was held at the end of the Spring semester (03). The Associate Dean for Academic Affairs asked that revised plans be submitted early in the Spring (04) semester. These plans will form the base of the College's assessment plan that will be submitted to the Office of the Provost by the end of the Academic Year. There is considerable evidence that faculty are increasingly concerned with making the learning environment and outcomes as relevant and rich as possible for all students.