

**SOUTHERN UTAH UNIVERSITY**  
**Agriculture and Nutrition Science Department**  
**Academic Outcomes Assessment Plan**  
**Academic Year 2004-2005**

**Expanded Statement of Institutional Purpose**

The Agriculture and Nutrition Science Department (AGNS) reflects the mission of the College of Science and is consistent with the mission, vision and goals of the university. The department consists of two programs (agriculture and nutrition), each with its own discipline-specific mission and goals. The composite mission of the department is to provide students with excellent classroom, laboratory and field experiences leading certificates, associates and baccalaureate degrees in their chosen field of study. The department is also engaged in related scholarship of application and extensive service activities. Through well-educated, professionally qualified faculty and staff, excellent physical resources (classes and labs) and generous experiential learning opportunities, the department can demonstrate how its mission embraces the five university mission items that “provide students a personalized learning environment to foster meaningful experiences involving the mind, heart and hands.”

<u>Mission Statement for Agriculture</u>	<u>Intended Outcomes/Objectives</u>	<u>Assessment Criteria and Activities</u>	<u>Results and Summary of Assessment</u>	<u>Use of Results</u>
<p>The agriculture program (AGSC) offers all students the opportunity to understand the discipline of agriculture as an applied science and a model for the principles of bioeconomics. The program is to be closely allied to the concept of service to the agricultural community. Recognizing the diversity of agriculture, faculty will continue to articulate partnerships with colleagues and programs across the university campus. The agriculture program will demonstrate teaching excellence by maintaining a faculty of well-educated and experienced agriculturalists. AGSC will promote a strong hands-on structured learning atmosphere and provide opportunities for students to gain practical experience and engage in independent scholarly inquiry.</p> <p><b>Goals Statement</b></p> <ol style="list-style-type: none"> <li>Through a broad offering of one, two and four-year programs, the agriculture program will prepare students for one of a number of careers in agricultural science and industry, farm and ranch management, and related public or private service.</li> <li>The program will prepare students to pursue advanced degrees or admission to a professional school upon completion of their work at SUU.</li> </ol>	<ol style="list-style-type: none"> <li>Students will demonstrate knowledge and applications-based competency in their particular certificate program, degree and emphasis (i.e., Certificate in Livestock Farm Management; AAS in Livestock Farm Management; BIS in Agricultural Science and Industry with an emphasis in agribusiness, animal science, plant science, or general agriculture; pre-veterinary studies).</li> <li>Students will use scientific methodology; employ critical thinking skills; apply appropriate tools/methods/theories to address problems and, carry out investigations as a means to understand the challenges of providing food, fiber, by-products, and recreational opportunities to others.</li> <li>Students will communicate effectively using terminology appropriate to the discipline and understand the role of leadership in the field of agriculture.</li> <li>Students will express satisfaction with their learning experience and be well prepared for post-graduation plans and opportunities.</li> </ol>	<p>Assessment criteria and activities that are aligned with specific outcomes and objectives are listed below.</p> <ol style="list-style-type: none"> <li>By graduation, students will be required to receive a passing grade of C- or better in all courses applied to program completion based on assessment measures applied to each course. Course embedded activities and co-requisite labs will enable students to demonstrate their competency in applications appropriate to each course.</li> <li>Several agriculture classes have laboratories or are lab intensive courses. Labs are co-requisites to lectures and involve student projects requiring them to gather data, analyze results, and reach reasonable conclusions in order to satisfy course requirements. <ol style="list-style-type: none"> <li>Interested students may engage in independent undergraduate research, directed studies, and/or experiential learning activities, such as internships and practicums.</li> <li>Several theories, protocols, and standard practices will be applied and reinforced through hands-on applications.</li> </ol> </li> <li>At least one course at each level requires a significant writing component. <ol style="list-style-type: none"> <li>Several laboratory courses require written and oral reports, and abstracts.</li> <li>Student directed study projects and undergraduate research projects require an oral presentation before an audience of faculty, staff, and peers.</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>All students met the criterion Fall Semester 2004 and three students did not in the Spring Semester, 2005.</li> <li>All laboratory courses are numbered and graded separately from co-requisite lectures. Scientific protocols are integrated into several classes and laboratories and students continue to “grow” undergraduate research projects from them. <ol style="list-style-type: none"> <li>Two students presented undergraduate research projects in April of 2005 and one received first place in his category. Both students attribute their success in gaining acceptance to post-graduate programs (veterinary and pharmacy) partially to their undergraduate research projects. Thirty-two students completed internships for credit during AY 2004-2005. Thirty six in 2004 and 21 in 2003.</li> <li>The university farm has been used extensively for hands-on learning to the extent that an additional pre-lab demonstration room has been added to alleviate overlapping laboratories. A SUU Farm Master Plan has been developed. Agriculture undergraduate research projects, internships, community interests, structured labs and several class projects use SUU farm resources.</li> <li>At least one course at every level requires a writing element which is a grading component. Preceptorships have been added to the general education animal science course which also requires a written report using scientific format. Students are required to present their undergraduate research projects.</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>Not inordinately high. No action required at this time. Perhaps consider raising the standard from “C-“ to “C” in the future.</li> <li>Continue the process. No adjustments required at this time.</li> <li>Encourage increased participation in independent scholarly work by undergraduates. Continue the process on internships.</li> <li>Develop strategies for adoption of the first phases of the Valley Farm Master Plan as an important component of the agriculture program’s learn by doing concept.</li> <li>Continue the process. This will grow naturally as more students are encouraged to participate in undergraduate research (2.b. above).</li> <li>Continue the process. Make sure that numerous leadership and service opportunities continue to be presented to students through department activities.</li> <li>Very favorable. No adjustment required at this time. Sample size could have an affect. Watch this for trends over several years as the sample size grows.</li> <li>No adjustments or action required.</li> <li>Maintain this level as minimum and set a reasonable goal to increase the overall rating of key courses.</li> <li>Continue to track students over the next 6 months. Make certain students are kept aware of employment opportunities. Continue updating the job board in the Science Center.</li> <li>Continue the process already underway for developing an equine</li> </ol>

**Mission Statement for Agriculture**

**Intended Outcomes/Objectives**

**Assessment Criteria and Activities**

**Results and Summary of Assessment**

**Use of Results**

d. Students will be provided opportunities to develop and demonstrate communication and leadership abilities as a structured curricular component.

4.a. The exit survey will indicate that at least 75% of graduating students will agree that the quality, availability and diversity of class and lab offerings were appropriate.

b. At least 75% of graduating students will agree that they are well prepared for post-graduation plans.

c. Students will rate those courses that (in their opinion) best serve AGSC program goals stated under that section of this document..

d. At least 75% of students who actively seek employment in the field will have jobs within 6 months of graduation.

e. An active advisory committee will favorably evaluate curriculum, resources and pertinent experiences in preparing students for employment or further study in the field. In addition, the committee will articulate with other agriculture-related planning efforts conducted by the university.

3.d. This is the first full year of requiring AGSC 1990, Agriculture Leadership, as part of the program core. Students are assessed on a variety of leadership and service activities. Thirty students enrolled this academic year.

4.a. Quality of courses 100 percent – 2005 (91 percent – 2004). Availability (time) 86 percent – 2005 (73 percent – 2004). Availability (not full) 100 percent – 2005 (91 percent – 2004). Diversity 100 percent – 2005 (73 percent 2004). Quality of labs 100 percent – 2005 (91 percent 2004).

4.b. One hundred percent reported being well prepared for post-graduation plans in 2005. This was 91 percent in 2004.

4.c. Student rating of agriculture courses in 2005 = 4.22 (84.4%)  
2004 = 4.25 (85%)

4.d. As of May 12 (one week after graduation), 71 percent of those actively seeking employment are working in employment related to their course of study.

4.e. Program enhancement was part of the work of the Education and Community Involvement Subcommittee of the President’s Task Force to Study the Agriculture Program and Resources. The report was presented to the standing Agriculture Advisory Committee and to the Provost of the University in 2004. As a result, on May 6, 2005, the Trustees approved moving forward on a proposed Equine Science and Management program.

curriculum. Move forward on preliminary phases of the Valley Farm Master Plan (see 2.b. and 2.c. above).

### Mission Statement for Nutrition

Recognizing the critical role of nutrition to all human endeavors, the mission of the nutrition program (NFS) is to provide sound, science-based principles, theories and applications to students who's personal or professional interests embrace the discipline. The nutrition program at SUU prepares students for a number of related careers or entrance into a graduate program upon degree completion at SUU. Additionally, the NFS program promotes wellness by offering a minor and support courses to compliment a variety of other disciplines, especially those related to health and human services, and athletics. The program demonstrates dedication of outstanding teaching by maintaining a faculty of well-educated, professionally qualified professor-practitioners.

### Goals Statement

1. The goal of the nutrition program at SUU is to prepare students for a number of related careers or entrance into a graduate program upon degree completion.
2. The intent of the program is to foster a broad understanding of the science of nutrition as it is integrated into all human pursuits.
3. As a reply to growing demand and increased interest, the Agriculture and Nutrition Science department and the nutrition program will explore further development of an American Dietetic Association compliant degree.

### Intended Outcomes/Objectives

1. Students will demonstrate their knowledge mastery of the discipline (i.e., nutrition and food sciences) at a level appropriate to the offering.
2. Students will be satisfied with the learning experiences provided them by the program.
3. Students will recognize and be prepared for numerous opportunities afforded them professionally or to pursue further study at a level appropriate to the offering.

### Assessment Criteria and Activities

1. NFS students will pass their NFS classes with a minimum grade of C, as evaluated by assessment measures within each course. NFS courses will include activities that enable students to demonstrate a reasonable level of proficiency in the skills they have learned.
  - 2.a. At least 80% of graduating students will agree with the statement, "The quality, availability, and diversity of NFS-related course offerings and lab experiences in my degree program were appropriate."
  - b. At least 70% of graduating students will give a rating of "Above Average" or "Excellent" to a selection of key NFS courses.
- 3.a. At least 80% of graduating students will agree with the statement, "I feel that NFS components of my program have well prepared me for post-graduation plans."
  - b. Acting advisory committee members will favorably evaluate relevant NFS courses and corresponding curriculum as it prepares students for post-graduation employment in their field. The advisory committee will endorse the programs and/or make specific recommendations.

### Results and Summary of Assessment

Note: All data represented here is from students majoring in Family and Consumer Sciences with a Nutritional Emphasis which was first assessed separately from the entire Family and Consumer Sciences program during AY 2004-2005. This will tend to affect comparative data when FCS – Nutrition was imbedded in the FCS program as a whole.

1. Fall Semester, 2004, one student did not meet the grade criterion and in the Spring Semester of 2005 all students met the criterion.
- 2.a. Quality of courses 89 percent – 2005. Availability (time) 50 percent – 2005. Availability (not full) 59 percent – 2005. Diversity 67 percent – 2005. Quality of labs 89 percent – 2005.
- 2.b. Ninety-one percent of 2005 FCS-Nutrition emphasis graduates gave a rating of "above average" or "excellent" to their NFS courses.
- 3.a. Eighty-nine percent of FCS – Nutrition emphasis graduates feel that their program has prepared them well for post-graduation plans.
- 3.b. Since the separation of NFS courses from the Family and Consumer Sciences program, no advisory committee meetings have been held.

### Use of Results

1. Continue the process. No action or adjustments required.
- 2.a. Continue the process on class and lab quality. There may be some effect of sample size, however, availability issues will have to be brought to the department forum. The development of the stand alone nutrition degree (apart from FCS) may lessen the time/space conflicts (with other FCS courses) and also (as a dietetics degree is developed) be a reply to diversity concerns.
- 2.b. Exceeds the criterion. Continue the process. No action or adjustment needed at this time.
- 3.a. Exceeds the criterion. Continue the process. No action or adjustment needed at this time.
- 3.b. The program has only been functioning in the new department for 10 months and does not have a stand-alone degree. The development of the recently approved (at the Trustee level) nutrition degree indicates that more will certainly be done here.