Dr. Burton Johnson teaching ‘Principles of Crop Production’. Students are taught principles of field crop production with emphasis on relationships of crops to their climate and production considerations as a means of managing resources and environmental factors.
A. Department/Unit/College Goals and Priorities for the Past Year
The goals of the department are to continue to fulfill department mission of teaching and research in basic and applied plant breeding and genetics, weed science, biotechnology, horticulture, and agronomic crop production and turfgrass management; reevaluate, update, and revise the Plant Sciences curriculum; respond to evaluation of advisors and students; peer evaluation of courses; address the assessment/student outcome; and to reprioritize teaching, research, and extension activities in light of decreased funding and continually shifting priorities. Currently the department consists of 43 faculty, 75 technical and office staff, and 78 graduate students. The department has 215 undergraduate students with 147 enrolled in Crop and Weed Science, 42 in Horticulture and 26 in the Sports and Urban Turfgrass majors.

B. Executive Summary
a. Teaching
   The department continues to maintain high standards for its excellent graduate and undergraduate programs by actively recruiting highly qualified students and faculty. The department provides undergraduate and graduate students with the knowledge, skills and understanding critical for professional success in a changing global economy. Several classes are taught for the science General Education option. Two classes are taught via distance education and four more are being developed. The faculty encourage students to interact with faculty in other disciplines to broaden their experiences. Involvement in interdisciplinary undergraduate programs, such as Plant Protection and Biotechnology, allow our faculty to better address the needs of both agricultural and nonagricultural students.

   Loss of a weed science position led to restructuring course responsibilities within the department and has affected many teaching responsibilities. The weed science faculty felt that Dr. Kirk Howatt was best suited to teach the Principles of Weed Science course, PLSC 323. This course is the primary undergraduate course for the discipline. It is required in all majors in the department and, as such, has an important role in relating the intrigue and importance of weed science within agriculture. This course is offered spring of each year and includes five lab sections. This change required that someone else teach PLSC 453/653 ‘Advanced Weed Science’ and Dr. Mike Christoffers is the new instructor for that course. Dr. Christoffers will no longer teach PLSC 315 every fourth semester. Instead, Dr. Penny Kianian and Dr. Juan Osorno will each teach PLSC 315 once per year. Dr. Ted Helms who also taught PLSC 315 every fourth semester is currently developing a new course in genetics and will no longer teach PLSC 315.

b. Research/Scholarly/Creative Activities (tabulate totals)

| Peer Reviewed Publications (published or accepted) | Total | 104 |
| National or International Invited Presentations | Total | 37 |
| Juried presentations/performances/exhibitions | Total | N/A |
| Research Grants and Contracts | Cumulative Amount: | $8,780,902 |

c. Service/Outreach/Extension
   Marcelo Carena - Represented NDSU at the United Nations World Food and Agriculture Organization (FAO) as one of the founders of the Global Plant Breeding Initiative for Capacity Building in its third year of activity, which received $1.2 million from the Gates Foundation.

   Richard Horsley - Supervised the program of summer intern fellows from the University of Puerto Rico, Mayagüez. In 2011, two Puerto Rican female students and one Puerto Rican male student were recruited to serve as summer interns on two projects in Plant Sciences and one project in Plant Pathology.

   Thomas Kalb – Established a 1.5-acre site in Bismarck superior rose and annual flower trial garden and named Dragonfly. North Dakota State University took the lead in designing and establishing the garden.
Rod Lym was elected President of the Weed Science Society of America.

Senay Simsek received the NC-213 Andersons Cereals and Oilseeds 2011 Early-in-Career Award of Excellence.

Ken Grafton, Phil McClean, Bill Wilson, and Sharhryar Kianian of NDSU Plant Sciences and the Center of Excellence for AgBiotechnology are representing NDSU in a partnership with the Department of Primary Industries of Australia to develop improved crop varieties.

Kirk Howatt was named Educator of the Year by the Mid America Croplife Association.

Serving as president of the Association for the Advancement of Industrial Crops (AAIC), Burton Johnson hosted the 23rd Annual AAIC Meeting in Fargo on Sept. 11-14, 2011.

Phil McClean was awarded the Frazier-Zaumeyer Distinguished Lectureship at the biennial Bean Improvement Cooperative (BIC) meeting in San Juan, PR, in November.

Ken Grafton received the Meritorious Service Award at the Bean Improvement Cooperative meeting in San Juan, PR, in November.

Harlene Hatterman-Valenti was recognized as a Fellow of the North Central Weed Science Society (NCWSS).

Potato breeder Susie Thompson received the National Potato Council’s Meritorious Service Award.

C. Department/Unit/College Goals and Priorities for the Coming Year

Ensure the Plant Sciences office maintains a functional work environment. Given the progress that has been made in having a functional work environment in the department’s office, it would be unwise to take for granted that this atmosphere would continue if left unmonitored. It is important to maintain an environment where office staff members feel safe in bringing to you concerns they have with their work setting.

Continue the process of updating pre-release and variety release protocols for all plant materials developed in Plant Sciences. I need to make sure that this process is moving forward under the stewardship of Dale Williams and to keep the faculty updated on its progress. This will prevent faculty working on crops/plants without previous guidelines to think that they can move ahead with discussions on release without first contacting the department head and the AES director.

Create a new position for assistant head in the department and update the responsibilities of the associate head of Plant Sciences. The topic of creating the assistant head for the department was brought to the department’s faculty advisory committee. They were supportive of the proposal. This assistant head would be responsible for handling academic items, including assessment of student learning and reinvigorating the peer-review process of Plant Sciences teaching. Additional responsibilities for the assistant head will be defined in discussions with the associate head. Likewise, the role of the associate head will be further defined in these discussions.

Continue to work on getting the department faculty members to think more of their role to the department and not their discipline. As stated last year, this is a goal that will take some time to accomplish, but I think it can be done by having faculty focus on their role within the mission of the department.

Continue to introduce myself to the different commodity groups our department serves.

Items needed by the department

Timelier processing and completion of jobs by Facilities Management (discussed in a meeting with Mike Ellingson and VP Bollinger on March 28).

New field crops facility to replace Waldron Hall and the quality laboratories in Harris Hall.