Applications of Irrigation, Math, and Equipment Technology in the Turfgrass Industry
(2.0 credits)

Normally Offered:  Fall semester, every other year, next offered in 2014. Instructors Dr. Richard Hurley (Adjunct Professor, Center for Turfgrass Science) and Dr. Bruce B. Clarke (Extension Specialist in Turf Pathology). In addition, guest lectures will be invited for presentations on selected topics.

Pre-requisites and other registration restrictions:
11:776:304 (Turfgrass Management) or permission of instructor

Format:  Lectures and field demonstrations are presented once a week (two back to back 55 minute lecture periods).

Description:
This is an applied upper level course designed for juniors and seniors interested in turf and landscape management. This course will be a recognized elective within the Plant Science Curriculum but may be taken by non-Plant Science majors.

Learning Goals:
- To learn the fundamental principles of irrigation design, installation and maintenance, mower technology, and mathematics applications for turf and landscape areas.
- Students are expected to think critically about issues in turf and landscape management and to understand how to develop innovative management strategies that are practical, environmentally sound and sustainable.

Measures of Assessment:
- Quizzes are given every week and a final exam to measure student learning.
- In addition, oral or written reports may be assigned as part of case studies projects that assesses mastery of subject matter in turfgrass and landscape management.
- An attempt will be made to survey graduates who obtain employment in turfgrass and landscape fields to assess the usefulness of the course and to revise content as needed to maintain course relevance.
Topics:
- Covers subjects such as irrigation design, installation and maintenance, mower technology, and mathematics applications for the management of golf, sports, and landscape areas that are not covered extensively in other courses at the University.
- Instructors will use lectures, hands on demonstrations, interactive discussions, case studies, to teach the fundamentals of turfgrass science. This course focuses on critical thinking rather than passive learning to solve real world problems commonly confronted by turf and landscape managers in the field. Students are encouraged to share their experiences in classroom discussions.

Required and Recommended Course materials:
Most lectures are power point presentations that will be made available to students to review and study. Hand outs will supplement classroom discussions. Some subjects will be presented using irrigation and mower equipment brought into class and used for hands on teaching / discussions.

Policies for Exams, Assignments, Attendance, and Grading
Final grade based on weekly quizzes and take home assignments – 75% and a final exam – 25%

Students are expected to make up quizzes and take home assignments within a week of the due or quiz date.