

Lecture 10:35 – 11:50 am Tuesday and Thursday
204 Johnson Hall

Prerequisite: Crops 301 (or equivalent and/or instructor’s permission)

Instructor: Dr. William Johnston
219 Johnson Hall
509-335-3620
wjohnston@wsu.edu

Text: none required; handouts and required readings

General Scope and Rationale:

This course is designed to relate to the student major features of the turfgrass ecosystem, interactions between ecosystem components, the integration of turfgrass management systems, and the use of Best Management Practices to protect environmental quality. Environmental responsible turfgrass management will be emphasized throughout the course. The course will emphasize turfgrass systems (heavily orientated to golf course management) in the Pacific Northwest. The goal is to integrate issues of turfgrass management systems and ecosystem function into sound environmental stewardship.

Student Learning Outcomes: The student will:

1. Identify components of the environment and determine how they affect turfgrass ecology and management.
2. Identify the basic components of BMPs and relate them to turfgrass management.
3. Develop strategies for implementing effective and efficient turfgrass management programs.
4. This is a writing in the major course [M]; two term papers and discussion of paper #2’s topic will be required.

Grading:

Tentatively, course grades will be computed on a basis of **550 total points** with the following breakdown:

3 one-hour lecture exams	300 points
1 final lecture exam or weekly quizzes	100 points
Turf topic writings and presentation assignment	150 points

A = 93% and above	B- = 80-82%	D+ = 67-69%
A- = 90-92%	C+ = 77-79%	D = 60-66%
B+ = 87-89%	C = 73-76%	F = below 60%
B = 83-86%	C- = 70-72%	

Idaho students: A = 90% and above; B = 80-89%; C = 70-79%; D = 60-69%; and F + below 60%.

No curving of grades will be done. Missed exams may be made up at the discretion of the instructor, provided a "valid" reason is presented. All exams will include essay/discussion type questions and specific objective questions covering lecture and assigned reading materials. Old (past few years) lecture and laboratory exams will be posted study aids.

Plagiarism and Cheating policy:

(<http://www.studentaffairs.wsu.edu/conductOffice/partOne.asp>)

Copyright and Intellectual Property WAC 504-25-018

Violation of copyright laws and the intellectual property rights of others is prohibited.

Prohibited acts include, but are not limited to:

1. Posting the works of another person on an internet website without the permission of the creator;
2. Copying the creative works of another without the permission of the creator;
3. Selling a recording of a presentation by another without the permission of the presenter;
4. Claiming the works of another as one's own;
5. Using the copyrighted works or intellectual property of another for profit without the permission of the owner;
6. Copying or digitally transmitting video or audio files without the permission of the owner; or displaying a copyrighted work publicly without the permission of the owner.

Consequences and Punishment:

(http://www.wsulibs.wsu.edu/electric/trainingmods/plagiarism_test2/policy.html)

1st Offense: The student receives a letter of concern from the Office of Student Conduct in addition to instructor (professor) and department level actions.

2nd Offense or Serious Offense: If through an official hearing involving the Academic Integrity Conduct Board, the student is found in violation of academic integrity statutes, he/she will face suspension or expulsion.

Attendance Policy: Attendance is highly recommended at all class lectures is mandatory at all designated discussion periods.

Students with Disabilities: Reasonable accommodations are available for students with a documented disability. If you have a disability and may need accommodations to fully participate in this class, please visit the Disability Resource Center (DRC). All accommodations MUST be approved through the DRC (Admin Annex Bldg, Room 205). Please stop by or call 509-335-3417 to make an appointment with a disability specialist. If you have any questions, please contact Rosie Pavlov at pavlovr@wsu.edu or 335-7974.

Academic Honesty: The Faculty Senate proposed and the Board of Regents approved new Academic Integrity procedures beginning academic year 2007-2008. The policy requires instructors to inform students of suspected violations as well as information

about how to appeal an allegation of dishonesty. In addition to the penalty assigned by the instructor, students will be required to attend a workshop for first time violations. Further violations will be referred to the University Conduct Board and can have significant consequences, including dismissal from the University. For additional information click on Academic Dishonesty at: <http://www.conduct.wsu.edu/>

Safety: Washington State University is committed to maintaining a safe environment for its faculty, staff, and students. Safety is the responsibility of every member of the campus community and individuals should know the appropriate actions to take when an emergency arises. In support of our commitment to the safety of the campus community the University has developed a Campus Safety Plan, <http://safetyplan.wsu.edu>. It is highly recommended that you visit this web site as well as the University emergency management web site at <http://oem.wsu.edu/emergencies> to become familiar with the information provided.

Syllabus Statement – Jan. 2016 Classroom and Campus Safety

Classroom and campus safety are of paramount importance at Washington State University, and are the shared responsibility of the entire campus population. WSU urges students to follow the “**Alert, Assess, Act**” protocol for all types of emergencies and the “[Run, Hide, Fight](#)” response for an active shooter incident. Remain **ALERT** (through direct observation or emergency notification), **ASSESS** your specific situation, and **ACT** in the most appropriate way to assure your own safety (and the safety of others if you are able).

Please sign up for emergency alerts on your account at [MyWSU](#). For more information on this subject, campus safety, and related topics, please view the [FBI's Run, Hide, Fight video](#) and visit the [WSU safety portal](#).

Sincerely,



Erica Weintraub Austin & Ron Mittelhammer
Interim Co-Provosts

**Crop Science 401
Lecture Outline**

Turfgrass Science

Spring 2016

Professor: Dr. William Johnston
219 Johnson Hall
335-3620 (office)
wjohnston@wsu.edu

Lecture Tuesday and Thursday
10:35–11:50
204 Johnson Hall (JSN)

Lecture	Topic
1	Class introductions Introduction to history of turfgrass management Pre-course review exam
2-3	Turfgrass environment Abiotic Biotic Microbiology of soils
4-5	Environmental issues in turf Historical perspective and environmental ethics Benefits of turfgrass systems Introduction to current issues
6	Objectives of turfgrass management Turfgrass manager's perspective Ecological perspective
7-8	Turfgrass cultivar development Conventional development Turfgrass biotechnology and GM turfgrass Native grasses Pacific Northwest Grass Seed Production
9	Exam 1 February 9
10-13	BMPs/IPM integrated management systems for turfgrass Concepts/components Environmental monitoring (example for <i>Poa annua</i>) Organic turfgrass management
14-16	Utilization and conservation of water resources Turfgrass sand-based rootzones Soil water dynamics Water quality issues in urban sites Effluent water use on turf
17	Wetland and wildlife conservation issues
18	Exam 2 March 10
19	Turfgrass nutrient management
20-24	Turfgrass pesticides and plant growth regulators
25-27	Cultural problems and practices Thatch Compaction Aerification Topdressing Rolling and green speed Summer stress on golf greens Algae and moss
28	Exam 3 April 21
29-30	Writing assignment #2 class presentations and discussion Final Exam Tuesday May 3 10:10-12:10 JSN 204