

HORT 2239 GROUNDS IRRIGATION SYSTEMS

SEMESTER: Fall

LECTURE: Monday and Wednesday: 9:00 – 9:50 am

LAB: Thursday: 1:00 – 2:40 pm

Thursday: 3:00 – 4:40 pm

LOCATION: Environmental Horticulture 0107

INSTRUCTOR: Dr. James N. McCrimmon, Associate Professor of Agriculture and Environmental Horticulture

OFFICE: Environmental Horticulture Building, Room # 137

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TEXTBOOK: Keesen, Larry. 1995. *The Complete Irrigation Workbook*. Landscape & Lawn Maintenance, ISBN 1-883751-01-2 and Rochester, Eugene W. 1995. *Landscape Irrigation Design*. American Society of Agricultural Engineers. ISBN 0-929355-61-X

REFERENCES: Turfgrass Information File at Michigan State University (www.tic.msu.edu). *Golf Course Management, Through The Green, Carolinas Green, USGA Green Section Record, Grounds Management, Landscape Management, and World Wide Web*.

SUPPLIES: A calculator and proper clothing are required.

DESCRIPTION: This course is designed to familiarize students with the principles and practices of grounds irrigation systems. Installation, repairs, and troubleshooting will be emphasized.

OUTLINE: Introduction; Practices; Schedules; Uniformity; Design; Equipment Selection; Irrigation Heads; Zoning; Drip Irrigation; Water Movement; System Installation; Troubleshooting; and System Evaluations.

LABORATORY: Labs will parallel with lecture materials providing both hands-on experiential learning opportunities and written responses.

LEARNING OUTCOMES: Upon completion of this course, each student will be able to:

Calculate and solve mathematical problems associated with irrigation.

Disassemble and reassemble irrigation components properly.

Troubleshoot and correct common irrigation problems.

Install irrigation system parts such as heads, pipes, valves, quick couplers, and other components.

Operate a trencher for digging lines for irrigation piping.

Understand the function and operation of a satellite control station.

GRADES: The semester average is determined by using the following percentages (%):

30% Lecture Exams (2)

30% Lab Exercises (15)

10% Forest Lakes Experiential Learning Activities (10)

15% Quizzes (3 - 5)

15% Final Exam

FOREST LAKES AND EXPERIENTIAL LEARNING: Experiential learning will involve 10 activities at one hour each. These maintenance activities will be identified and supervised by either the golf course superintendent, professor, or another member of the management team. Support paperwork must be completed by the student, initialed by the golf course superintendent, and submitted to the professor. If you have a conflict (such as other work, job, play, etc.) on your weekly calendar which will not permit these Forest Lakes Golf Course Experiential Learning Activities to be scheduled, then you should drop this class. The purpose of these activities is learning, not busy-work or filler time.

* Any student in this class who has specific needs because of learning disabilities or any other disability should feel free to come and discuss this with me.

ATTENDANCE: Students are expected to attend ALL class and lab meetings, BE ON TIME, and to have read all portions of the text (assignment) before the class meets. Attendance will be taken at the beginning of each class meeting. Any problem that affects attendance should be discussed with the instructor. Students who are aware of impending commitments, which will interfere with their class attendance, need to contact me with the reason for their absence; and, I will assign the appropriate material to study. Students are responsible for getting with other students for notes covering any missed materials.

Attendance is mandatory. I have an obligation to the taxpayers of Georgia who pay over 80% of your education cost through their tax dollars. Good work ethics are learned through regular attendance in class activities. It has been found that student grades are affected by lack of attendance and participation. I have attached ABAC's Attendance Policy. The following indicates the number of absences allowed in this course.

Number of Absences:

MW (Thursday lab) course - 3 credit hours - 6 absences and on the 7th absence the student will receive an "F".

An absence is when you do not attend a lecture or lab for any reason. If you are late for lecture or lab, every two times that you are tardy will equal one absence.

There are exceptions and circumstances that may occur and we will address them as needed.

ABSENCES/WITHDRAWALS: See the student handbook for detailed excused absence and course withdrawal policy. As long as the student is prepared to learn, I will do everything possible to ensure that each student has the opportunity to succeed. Students are expected to attend every class and lab session. If, by the mid-term withdrawal deadline, any student feels they cannot proceed in the course for whatever reason, they may withdraw from the course without penalty (excepting HOPE). Those students who "abandon" a class after the mid-term withdrawal deadline will receive an "F".

ACADEMIC RESPONSIBILITY: Students are urged to pay careful attention to ABAC's Statement of Academic Dishonesty found in the college catalog. It is unacceptable to claim the work of someone else as your own. Academic dishonesty will not be tolerated and will be addressed appropriately.

COURSE MATERIALS: The syllabus has been distributed and will be on the web. Other course materials, such as projects, articles, notes, etc. may be distributed during lectures or labs. You are responsible for making sure you have them.

EXAMINATIONS: Lecture exams and lab exercises will be administered throughout the semester as identified in specific course outlines. Attendance and participation in the labs will be scored. Additional projects and reference material will be assigned accordingly.

MAKE-UP EXAMS: It is very important that no exams be missed. Make-up exams may be arranged after consultation with the instructor, and if circumstances for missing an exam were exceptional. Make-up exams must be completed within 5 school days of the missed exam. If the student does not make arrangements to make-up the exam within that time frame, they will receive a “0” for that exam. There will be no make-up for missed labs or quizzes.

GRADES: The grading system is the same as outlined in the college catalog. A grade of "C" or better is required for all courses with HORT, AENT, AGRP, and AGRY prefixes; and ENGL 1101 and MATH 1002. Any student registering for an internship must have satisfied prerequisite credit hours and have completed an announced orientation session.

COMPUTERS: Effective immediately, all new campus computers will have thumb-drive access and NOT floppy or zip disk drive access. Students will be required to purchase thumb-drives for classroom and lab applications.

DISABILITIES: Any student in this class who has specific needs because of learning disabilities or any other disability should feel free to come and discuss this with me.

POTENTIAL HAZARD RISKS ASSOCIATED WITH CLASS/LABORATORY ACTIVITIES:

Potential Risks: Employ any and all protective measures as identified. Our outdoor labs are times for working. This is no place for “playing around.” Your participation in lab exercises is a portion of your lab grade.

Allergies, Insect Bites: Each student must take individual protective measures for their allergies (this could include insect bites). Each student must be aware that biting insects, stinging insects, and spiders are present in most natural settings such as turfgrasses, grounds, and associated areas.

Falls/Slips/Cuts/Abrasions: Wear appropriate shoes and clothing to all shop and outdoor laboratory exercises. Do not wear sandals, flip-flops, or similar footwear to lab. If a student wears such footwear, they will not be able to stay and participate in the lab. Wear some type of footwear that covers your foot. Pay attention to your surroundings and proceed accordingly.

Exposure to Chemicals and Fertilizers: Personal Protective Equipment (PPE) will be water-proof shoes, long pants, shirts with long sleeves, and protective gloves during all

calibration exercises. Instructors will supply disposable gloves. It is each student's responsibility to dress appropriately when instructed to do so.

Equipment Demonstrations: You will only observe the operation of all motorized equipment, until said time that you can be properly trained in its' operation. Stand a safe viewing distance and listen to the instructor's precautions. The instructor will supply ear plugs when necessary.

Heat Stress: If you have a low heat tolerance, wear protective clothing and a hat and carry water to cool and refresh.

Vehicle Travel: It is each student's responsibility to obey safe travel procedures from the ABAC campus or the Environmental Horticulture Building to the designated laboratory site (Woodruff Farm, Forest Lakes Golf Club, etc.). You must arrange your own transportation, unless otherwise identified.

Other: It is impossible to anticipate all potential hazards. The potential for injury always exists. Follow all necessary precautions and practice safety in all conditions.

CLASS DECORUM:

Beepers, cellular phones, and all other electronic devices must be in the "off" position. No use of cell phones or other electronic devices is permissible during lecture and lab. No text messaging is allowed. The first time that a student is using any such device, they will be told to leave the lecture or lab. The rest of the class will have a pop test.

PHONES/IPODs/MP3 Players: Cellular phones and/or Personal Listening devices and other similar devices must be turned to the **off** position or not brought to class or labs. If a student's phone rings or they are seen sending/receiving text messages or wearing earbuds/headphones during class and disrupts the learning environment, there will be an immediate pop test for the class. In addition, all phones are to be out of sight during exams. Anyone caught with a visible cell phone will lose a letter grade on that exam.

Students should not be using the computer and other devices in the lecture room. The only exception is when they are giving a presentation.

Random conversation after class begins will not be tolerated.

Smoking, the chewing of tobacco or use of snuff, or any other tobacco is at a zero tolerance level. Tobacco chewers take note of this.

Foul or profane language will not be tolerated. Hats or caps may not be worn in the classroom.

Students must respect all equipment and furniture in the facility. Writing, drawing, etc. on desks or other structures will not be tolerated. Students will exhibit an acceptable level of professionalism.

Students must be reasonably dressed in the classroom and the lab. During labs, students should wear acceptable footwear. This is for your own safety. Flip flops, sandals, or other similar footwear is not acceptable.

NOTES:

Please feel free to ask questions and bring up discussions in class.

If you should become sick or very uncomfortable during class, please feel free to quietly leave the room. If you need help to get out of the classroom, please get me or someone else to assist you.

Please feel free to come by my office to schedule an appointment if you feel that I can further assist you with any problem or conflict.

Be prompt for class. Teaching and learning is a team effort. The ultimate responsibility of learning is yours.

The instructor reserves the right to modify any of this information, procedures, or dates as necessary during the course. You will be notified in advance of changes.

VERIFICATION STATEMENT:

By signing your name on the first lab exercise and/or exam in my class in which you are registered, you are indicating to me that you have read, understand, and accept all college, curricular, and professorial regulations regarding such class, and will be held accountable for such.

ABAC ATTENDANCE POLICY

Courses at Abraham Baldwin Agricultural College are provided for the intellectual growth and development of students. To attain maximum success, students must attend all their classes, be on time, and attend all scheduled course activities including, but not limited to, field trips, seminars, study sessions, individual conferences, and lectures. This interaction with instructors and other students is an important element of the learning process, and a high correlation exists between class attendance and course grades. A student must understand the importance of regular participation in classroom and laboratory activities. The absence of any student affects not only his or her performance but the performance of the class as a whole. Absence from class, for whatever reason, does not excuse a student from full responsibility for class work or assignments missed. Students must accept this responsibility.

Instructors will keep accurate attendance records and must report the individual number of absences with midterm and final grades. Students whose number of unexcused absences is more than twice the number of class meetings per week (the equivalent of two weeks of instruction) will receive a grade of "F" for the course. Fewer absences than twice the number of class meetings per week may result in grade penalties at the discretion of the instructor. Specific attendance requirements applying to labs, clinics, accelerated classes or Learning Support will be adapted to the unique situation by the appropriate division. Final determination of what constitutes an excused absence rests with the classroom instructor. In implementing this Policy, faculty will not include in a student's unexcused absences those absences incurred due to authorized and approved College sponsored events (or in the case of joint-enrollment students high-school sponsored events) in which the student represents the institution as part of a group or under the direct supervision of a faculty or staff member.

Whenever a student is absent, whether for official or personal reasons, the student must assume responsibility and provide notice to the instructor, preferably in advance, for making arrangements for any assignments and class work missed because of the absence. However, final approval for make up work remains with the individual instructor. A student who stops attending class without officially withdrawing from the course is subject to this attendance policy and will receive a grade of "F" for the course.

At the beginning of each semester, instructors will explain clearly to their students' specific attendance requirements (including possible penalties). Additionally, they will publish the attendance policy on their syllabi and web-sites. A student penalized for excessive absences may appeal through the grade appeal process, as stated in ABAC's college catalog and student handbook.

Revised 7/28/05