# GEORGIA INSTITUTE OF TECHNOLOGY

## SCHOOL OF ELECTRICAL & COMPUTER ENGINEERING

Syllabus: ECE4371 Antenna Engineering Laboratory

## **ECE4371 Antenna Engineering Lab**

Unscheduled Laboratory, Van Leer 365

Course Websites: T-square, http://propagation.ece.gatech.edu/ECE4370/index.html

#### **INSTRUCTOR INFORMATION:**

InstructorEmailOffice Hours & LocationProf. Gregory D. Durgindurgin at gatech.eduTBD in Van Leer 507

#### **COURSE INFORMATION**

### **Description**

This laboratory-based course provides students concurrently taking ECE 4370 Antenna Engineering an experimental and practical understanding of antennas and their properties.

## **Course Goals and Learning Outcomes**

As part of this course, students ...

- 1. design, analyze, simulate, implement, and evaluate antennas.
- 2. use engineering techniques, skills, and tools, including software-based methods.
- 3. develop basic skills in writing laboratory reports and other documentation.

Upon successful completion of this course, students should be able to ...

- 1. design and implement **RF antennas**.
- 2. develop evaluation methods for these circuits and analyze and interpret the resulting data.
- 3. write laboratory reports and documentation conforming to technical writing standards.

### **Graded Components**

AssignmentsWeightLaboratory Assignments50%Final Design Project50%

### **Description of Graded Components**

Expect approximately 6 laboratory assignments with write-ups or reports due during the semester. A final design project will be assigned midway through the term and may involve group work.

For all assignments and projects, late work is not accepted. Special accommodations can be made for medical emergencies, interviewing, and other important events, but only if sufficient advance notice is given to (and permission granted by) the instructor ahead of time.

### **Grading Scale**

This course uses a traditional A (>90.0), B (>80.0), C(>70.0), D(>60.0), F(<60.0) grade scale unless special circumstances require a curve to achieve the recommended course GPA as specified by the ECE course catalog. Traditionally, this course target GPA is 3.30. I do not curve *downward* from the traditional grade scale.

#### **Classroom Management**

This laboratory course has no scheduled hours. Students are expected to complete assigned laboratory work by specified deadlines through self-scheduled time in the Antenna Engineering Laboratory in Van Leer 365.

#### **COURSE MATERIALS**

#### **Course Text:**

LabVolt Manual Antenna Fundamentals (provided by GT)

#### **Additional Materials:**

Additional notes and materials for this course will be disseminated through T-square.

#### **COURSE EXPECTATIONS & GUIDELINES**

### **Academic Integrity**

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit <a href="http://www.catalog.gatech.edu/policies/honor-code/">http://www.catalog.gatech.edu/policies/honor-code/</a> or

<u>http://www.catalog.gatech.edu/rules/18/</u>. Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

## **Collaboration & Group Work**

It is expected that each student upholds the Georgia Tech honor code when preparing work for this class. Everyone must turn in their own work (or group's work where specified) without contribution from another person or source, whether homework, project, or test.

#### **Student Use of Mobile Devices**

Students may not use mobile devices during tests other than as calculators. Observations of violations during test periods will be reported to the Office of Student Integrity.

#### Accommodations for Individuals with Disabilities

If you are a student with learning needs that requires special accommodation, contact the Office of Disability Services at (404)894-2563 or <a href="http://disabilityservices.gatech.edu/">http://disabilityservices.gatech.edu/</a>, as soon as possible to make an appointment to discuss your special needs and to obtain an accommodation letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

### **Student-Faculty Expectations**

At Georgia Tech we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. See <a href="http://www.catalog.gatech.edu/rules/22/">http://www.catalog.gatech.edu/rules/22/</a> for an articulation of some basic expectation that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.