

# Electromyography

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| Instructor     | Gretchen D. Oliver PhD, FACSM, ATC, LAT |
| Meeting Times  | Monday                                  |
| Office         | KINESIOLOGY Building 105                |
| E-mail Address | goliver@auburn.edu                      |
| Office Hours   | By Appointment                          |
| Credit Hours   | 3 semester hours                        |

## **REQUIRED TEXTBOOK**

Cram, JR, & Kasman GS. Introduction to Surface Electromyography. Aspen Publication: Gaithersburg, MA. (ISBN 0-8342-0751-6).

Important websites: <http://www.noraxon.com> <http://www.delsys.com>

## **COURSE DESCRIPTION**

This class is designed to discuss the theory and fundamentals of surface electromyography as well as application and analysis.

## **COURSE INSTRUCTIONAL OBJECTIVES**

The student will demonstrate an understanding of and the ability to:

1. Understand processing and sampling theories.
2. Apply theory to data acquisition and analysis.
3. Develop a Users Handbook for sEMG.

## **COURSE REQUIREMENTS**

This is a special topics class and participation is highly recommended. There will be quizzes throughout the semester as well as the requirement of developing a users handbook for a specific application.

## **GRADING SCALE**

The grading scale for this course is as follows:

**A = 90 – 100%**

**B = 80 – 89%**

**C = 70 – 79%**

**D = 60 – 69%**

**F = Under 59%**

**Participation/ Quizzes: 40%/10%** [10% will be subjective based on the perception of the professor on your engagement/participation in class]

**Exam/Users Handbook: 50%**

**Total: 100%**

## **STATEMENT of STUDENT ACCOMMODATION**

Students who need accommodations are asked to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternative time can be arranged. To set up this meeting, please contact me by e-mail. Bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have an Accommodation Memo but need accommodations, make an appointment with the Program for Students with Disabilities at 1244 Haley Center, 844-2096 (V/TT).

<https://fp.auburn.edu/disability/faculty/syllabus.asp>.

**E-MAIL** TigerMail is the official means of communication for Auburn University. The instructor will communicate with the class through Tiger Mail. You are responsible for this information, so please check your account regularly.

### **CONTINGENCY PLAN**

If normal classes are disrupted due to a high number of students experiencing illness or an emergency or crisis situation (such as a widespread H1N1 flu outbreak), the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials. Additionally, course content and assignments may be made available to you via Blackboard.

### **HONESTY CODE**

The University Academic Honesty Code and the **Student Policy eHandbook** [[www.auburn.edu/studentpolicies](http://www.auburn.edu/studentpolicies)] pertaining to cheating and plagiarism will apply to this class.

### **CLASS POLICY STATEMENTS**

**Participation:** Students are expected to participate in all class discussions. It is the student's responsibility to contact Dr. Oliver **PRIOR** to class if an illness or emergency requires the student to miss class. Any missed work due to a University approved excuses **MUST** be made-up within 5 days.

**Attendance/ Absences:** Attendance is required at each class meeting. If an exam is missed, a make-up exam will be given only for University-approved excuses as outlined in the **Student Policy eHandbook**. Arrangements to take the make-up exam **must be made in advance** and the exam taken within 5 days of the missed exam. Students who miss an exam because of illness should inform the Dr. Oliver prior to the missed class if possible. A doctor's statement for verification of sickness is required and should clear the absence with Dr. Oliver the day the return to class. Other unavoidable absences from campus must be documented and cleared with Dr. Oliver in advance. No late assignments or quizzes will be accepted outside of extreme circumstances noted by the Dr. Oliver. Please carefully adhere to established assignment deadlines. In such a case Dr. Oliver will have the discretion of lowering the assignment a percentage of the overall grade for each day that it is late.

**Questions/ Help:** Students are encouraged to ask questions and seek extra help on a regular basis. Please do not wait until the day before an exam.

#### **Classroom Policies:**

- All electronic devices must be turned off during classroom or laboratory periods, with the exception of laptops, which may be used for note taking only. NO phones or text messaging during class is allowed. All phones and electronic devices must be put away prior to the start of class. If these are found out – The student will be asked to leave the class.
- Students are expected to arrive to class on time. Those arriving late will not be permitted to hand in homework. Likewise, classes will end promptly at the scheduled time.
- Students are expected to come to class having completed the reading and prepared to discuss them.

**Professionalism:** As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College's conceptual framework. These professional commitments or dispositions are listed below:

- Engage in responsible and ethical professional practices
- Contribute to collaborative learning communities
- Demonstrate a commitment to diversity
- Model and nurture intellectual vitality