# ME 337L Engineering Measurements Lab Spring 2011

**Instructor:** Ahmad Fayed (TBE B153, <a href="mailto:fayeda@unlv.nevada.edu">fayeda@unlv.nevada.edu</a>)

http://complabs.nevada.edu/~fayeda/

Class Time: Section 001: Monday, 4:00 pm-6:45 pm, TBE B121

Section 002: Friday, 4:00 pm-6:45 pm, TBE B121

## **Lab Rationale**

The ME 337 Lab is designed to give the engineering student introductory-level hands-on experience with measurement equipment and data acquisition software that scientists, engineers, and/or technicians may encounter in their respective careers.

# **Expectations**

Upon completion of the lab, it is expected that the engineering student will demonstrate fundamental knowledge and operation of engineering instruments and transducers and associated signal conditioning units.

## **Course Content**

Week of	Торіс
01/17	No LAB (Martin Luther King, Jr. Day Recess)
01/24	Lab1 (LabVIEW Programming 1)
01/31	Lab 2 (LabVIEW Programming 2)
02/07	Lab 3 (LabVIEW Programming 3)
02/14	Lab 4 (NI ELVIS Station)
02/21	No LAB (Washington's Birthday Recess)
02/28	Lab 5 (Analog-to-digital conversion)
03/07	Lab 6 (FFT)
03/14	No LAB (Spring Break)
03/21	Lab 7 (1 <sup>st</sup> order system response)
03/28	Lab 8 (2nd order system response)
04/04	Lab 9 (Filters and encoder)
04/11	Lab 10 (Thermal Conductivity Measurement)
04/18	NO LAB
04/25	LAB QUIZ
05/02	NO LAB (Study week)

#### Grading

The grades will be determined by the following weight:

Attendance and Reports 70% Final quiz 30%

#### **Grade Breakdown**

Α	90-100%
В	80-89%
С	70-79%
D	60-69%

Office Hours (by appointments, email: <a href="mailto:fayeda@unlv.nevada.edu">fayeda@unlv.nevada.edu</a>)

### **Policy on Attendance and Lab Reports**

Students must attend all labs to be able to complete their Lab assignment. <u>Lab reports will NOT be accepted without attendance.</u> All Lab Reports are due at the beginning of the next Lab meeting and any reports submitted after this will be penalized. A penalty of 20% of the maximum grade will be assessed for each day of late submission of any report. Any report submitted more than five days late will be given a failing grade.

### Policy on Make-up Labs

There are no make-up labs given unless arrangements are made with the instructor at least 48 hours before the lab day to be missed or in case of illness (must bring a doctor's note).

**Academic Misconduct** - "Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution." An example of academic misconduct is plagiarism: "Using the words or ideas of another, from the Internet or any source, without proper citation of the sources." See the "Student Academic Misconduct Policy" (approved December 9, 2005) located at: <a href="http://studentconduct.unlv.edu/misconduct/policy.html">http://studentconduct.unlv.edu/misconduct/policy.html</a>.

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**Academic Accommodations for Disable Students** - Students with documented disabilities which may cause them to need assistance, such as help with note taking or additional time to write exams, etc, are encouraged to go to the UNLV Disability Resource Center (DRC) as soon as possible to make arrangements for such support services as may be needed. UNLV complies with the provisions set forth in Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. The DRC is located in the Student Services Complex (SSC-A), Room 143, phone (702) 895-0866, fax (702) 895-0651. For additional information, please visit: <a href="http://drc.unlv.edu/">http://drc.unlv.edu/</a>

**Policy on Religious Holidays** - It is the responsibility of the student to notify the instructor <u>no later than the last day of late registration</u> of his/her intention to participate in religious holidays which do not fall on State holidays or periods of class recess. This policy shall not apply in the event that administering the test or examination at an alternate time would impose an undue hardship on the instructor or the university which could have been avoided. For additional information, please visit: <a href="http://catalog.unlv.edu/content.php?catoid=4&navoid=164">http://catalog.unlv.edu/content.php?catoid=4&navoid=164</a>.

**Tutoring** - The Academic Success Center (ASC) provides tutoring and academic assistance for all UNLV students taking UNLV courses. Students are encouraged to stop by the ASC to learn more about subjects offered, tutoring times and other academic resources. The ASC is located across from the Student Services Complex, #22 on the current UNLV map. Students may learn more about tutoring services by calling (702) 895-3177 or visiting the tutoring web site at: http://academicsuccess.unlv.edu/tutoring/

**UNLV Writing Center** - One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 895-3908. The student's Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: <a href="http://writingcenter.unlv.edu/">http://writingcenter.unlv.edu/</a>

**Rebelmail** - By policy, faculty and staff should e-mail students' Rebelmail accounts only. Rebelmail is UNLV's Official e-mail system for students.