EECS 690 – SPRING 2018
SENSORS AND MEASUREMENTS
SYLLABUS

Course

Number: 65745
Location: 2425 LEEP2
Time: Tuesdays and Thursdays 9:30 a.m. – 10:45 a.m.

Professor

Dr. Arvin Agah
Office: 1 Eaton Hall
Office Hours: Tuesdays and Thursdays 10:45 a.m. – 11:45 a.m. or by appointment
Email: agah@ku.edu
URL: people.ku.edu/~agah

Textbook

Class notes provided in class.

Course Description

This course covers the theory and practice of engineering measurements and sensors. Topics include: sensor concepts, measurement theory (statistics and uncertainty analysis), measurement systems and instruments (analog and digital devices, temperature, pressure, velocity, and strain), and sensors (mechatronics, robotics, UAVs, security, vision, and bioengineering).

Credits

3.0.

Prerequisites

Junior, Senior, or Graduate Student in the School of Engineering.

Grading and Schedule

The course grade will be determined according to the given table, including the percentages and the due dates. Plan accordingly.
<table>
<thead>
<tr>
<th>Item</th>
<th>% of Grade</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>25%</td>
<td>Tuesday, February 27, 2018</td>
</tr>
<tr>
<td>Project Phase 1</td>
<td>20%</td>
<td>Tuesday, March 6, 2018</td>
</tr>
<tr>
<td>Exam 2</td>
<td>25%</td>
<td>Thursday, April 19, 2018</td>
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<tr>
<td>Project Phase 2</td>
<td>25%</td>
<td>Thursday, April 26, 2018</td>
</tr>
<tr>
<td>Project Presentations</td>
<td>5%</td>
<td>Tuesday, May 1, 2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday, May 3, 2018</td>
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</tbody>
</table>

The final grade will be determined based on the scale of:

- A: 90%–100%; B: 80%–89%; C: 70%–79%; D: 60%–69%; F: 0%–59%.

**Late Items**

If an item is turned in late, it incurs a one third reduction in grade for every day (24 hours) that the submission is delayed. For instance, if an item is due on Tuesday at 1 p.m. and is turned in on Wednesday at 4 p.m., it is considered two days late and will receive a maximum grade of 33%.

**Regarding Regrading**

A request for regrading must include the graded item and a brief and precise written description of the request. The time frame to request a regrading is two weeks, beginning with the class period within which the graded item was returned to class. A delay in getting or picking up the graded item does not extend the allowed time frame.

**Team Work**

The class project will be done in groups of students, as team work is an essential component of this course. If you are unable to find a group, you will be assigned to one. All members of the same team will receive identical scores on the team components. Therefore, it is the responsibility of the team members to ensure fair and equal contributions. No teamwork is allowed on other components of the class.

If there is a problem with individual member’s contributions, this must be discussed with the professor early on during the semester in order for timely mitigation. This can range from members increasing their level of efforts, to removing members from a team. Changing teams in the middle of the class project is difficult, and is only done as the last resort.

**Academic Misconduct**

The department, school and university have very strict guidelines regarding academic misconduct. Copying is not allowed on exams. Students are expected to submit their own work on individual programming projects, and collaborations on team programming projects must be
reported accurately. Instances of cheating will result in a grade of zero on the project or exam in question and referral to the department chairman and office of the dean of engineering.

Special Needs

"The Academic Achievement and Access Center (AAAC) coordinates academic accommodations and services for all eligible KU students with disabilities. If you have a disability for which you wish to request accommodations and have not contacted the AAAC, please do so as soon as possible. They are located in 22 Strong Hall and can be reached at 785-864-4064 (V/TTY). Information about their services can be found at http://www.access.ku.edu. Please contact me privately in regard to your needs in this course."