# Kennesaw State University MTRE 4400 – Directed Research – Mechatronics

Course Syllabus – Summer 2016 – 3 credits

#### I. Identifying information

Student: xxxxxxxxxxxx Course: MTRE 4400 Directed Research – Mechatronics, 3 credits

Instructor: Kevin McFall, PhD.

#### II. Course Description

This course supports research collaboration between Mechatronics Engineering at KSU and Universität Siegen. An appropriate project involving autonomous mobile robotics will be developed in collaboration with other students at the Universität Siegen.

### III. Objective of the Course

This directed study is intended to expose Kelsey to international collaboration in Mechatronics Engineering as part of a Strategic Internationalization grant awarded to the Department of Mechatronincs engineering.

#### IV. Detailed Schedule

- Week 1: Travel to Universität Siegen and familiarization with laboratory environment
- Week 2: Develop plan for research project
- Week 3: Literature review
- Week 4-9: Implementation of project details
- Week 14-15: Wrap-up and preparation for return trip

### V. <u>Description of Expected Roles</u>

The student is expected to work independently on this project, of course under direction of the instructor and research mentor(s) at Universität Siegen. At least weekly updates will be communicated to the instructor to ensure proper progression through the project. A minimum total of 144 hours of time is required on this project. The student is expected to follow all safety guidelines when interacting as directed by mentors and laboratory technicians.

#### VI. <u>Basis for Evaluation</u>

Primary deliverables of the project will be determined by the host research mentor. The student will be evaluated on satisfactory completion of tasks requested by the mentor (40%), compilation of an engineering logbook documenting the progress made and time spent (20%), presenting the work and experience Fall 2016 for an MTRE 1000 audience (20%), and submission of the research work for the 2017 National Conferences on Undergraduate Research or 2016 Early Career Technical Conference (20%). Grades will be assigned for each component according to the following rubric:

- A (90-100): Exceptional deliverable quality and/or completion of extended topics
- B (80-89): Satisfactory completion of deliverables
- C (70-79): Incomplete completion of deliverables
- D (60-69): Partial completion of deliverables
- F (0-59): Little or no completion of deliverables

# **University Policies**

## Academic Honesty

Every KSU student is responsible for upholding the provisions of the Student Code of Conduct, as published in the Undergraduate and Graduate Catalogs. Section II of the Student Code of Conduct addresses the University's policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to University materials, misrepresentation/ falsification of University records or academic work. malicious removal, retention, or destruction of library materials, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the University Judiciary Program, which includes either an "informal" resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct's minimum one semester suspension requirement.

## **Plagiarism Policy**

No student shall receive, attempt to receive, knowingly give or attempt to give unauthorized assistance in the preparation of any work required to be submitted for credit as part of a course (including examinations, laboratory reports, essays, themes, term papers, etc.). When direct quotations are used, they should be indicated, and when the ideas, theories, data, figures, graphs, programs, electronic based information or illustrations of someone other than the student are incorporated into a paper or used in a project, they should be duly acknowledged.

## **Disability Statement**

Kennesaw State University provides program accessibility and reasonable accommodations for persons defined as disabled under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Kennesaw State University does not deny admission or subject to discrimination in admission any qualified disabled student.

A number of services are available to help students with disabilities with their academic work. In order to make arrangements for special services, students must visit the Office for Student Disability Services and make an appointment to arrange an individual assistance plan. In most cases, certification of disability is required.

Special services are based on

- medical and/or psychological certification of disability,
- eligibility for services by outside agencies, and
- ability to complete tasks required in courses.

#### ADA Position Statement

Kennesaw State University, a member of the University System of Georgia, does not discriminate on the basis of race, color, religion, age, sex, national origin or disability in employment or provision of services. Kennesaw State University does not discriminate on the basis of disability in the admission or access to, or treatment or employment in, its programs or activities.

The Americans with Disabilities Act (ADA), Public Law 101-336, gives civil rights protections to individuals with disabilities. This statute guarantees equal opportunity for this protected group in the areas of public accommodations, employment, transportation, state and local government services and telecommunications.

The following individuals have been designated by the President of the University to provide assistance and ensure compliance with the ADA. Should you require assistance or have further questions about the ADA, please contact:

- ADA Compliance Officer for Students 470-578-6443
- ADA Compliance Officer for Facilities 470-578-6224
- ADA Compliance Officer for Employees 470-578-6030

For more information, go to: <u>http://www.kennesaw.edu/stu\_dev/dsss</u>.