Instructor
Dr. Melike Erol-Kantarci
merolkan@clarkson.edu

Lecture hours
MoWeFri 10:00am-10:50am

Office Hours @ CA2204
Monday 11am-12:00pm, Wednesday 11am-12:00pm, Thursday 1pm-3pm
Rest by appointment

Prerequisites
EE 407 Computer Networks (minimum F or instructor permission)

Suggested Reading

Course Objectives
Students will:
- learn the state-of-the-art sensor hardware and operating systems
- learn the fundamental protocols at several layers of OSI
- develop basic understanding of clustering and localization techniques
- become familiar with WSN application domains
- become familiar with various types of WSNs

Learning Outcomes
Students will:
- be able to design and implement medium access protocols
- be able to design and implement routing protocols
- be able to design and implement clustering and localization techniques
- use a state-of-the-art network simulator
- gain knowledge on recent topics such as smart grid, smart cities and cyber-physical systems
Tentative List of Topics

- Introduction to sensor networks
- WSN PHY
- Medium Access Control
- Network Layer
- Clustering
- End-to-end transport
- Localization
- Sensor Network Applications (Health, Smart grid, Industry, Smart cities, Cyber-Physical Systems)
- Security in WSNs

Course Evaluation

- Midterm: 20% - Week of October 12th
- Final: 25% - TBA
- Assignments and presentations: 25%
- Project: 30%

Policies

- Plagiarism software may be used for checking assignments and exams. Students should follow Clarkson University’s code of student conduct (http://www.clarkson.edu/studentaffairs/regulations/v.html.)
- If you have copied another classmates’ homework, all involved will get a zero. If you have copied anything from the Internet without proper citation you will get a zero.
- Late assignments with no medical excuses will be graded over 70.
- Assignments later than a week will not be accepted unless justified with a serious medical excuse.
- Students must make up all work missed due to absences of any kind. Arrangements to make up work missed must be made prior to the date the work is due. In the event that illness or other unforeseen circumstances such as a death in the family, arrangements to make up work must be made within two days of the due date. Students must therefore consult promptly with the instructor to make these arrangements.

Accommodation needs

Clarkson University assures equal educational opportunities by providing accommodations and services for qualified students with documented disabilities in accordance with Federal Law, specifically the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Any student who requires an accommodation based on the impact of a disability may contact me.