

SITE, University of Ottawa, *Fall 2011*

OCIECE: ELG7178B* (EACJ 5606*) Topics in Communications II
OCICS: CSI 5148 COMP5103 S/T

Wireless Ad Hoc Networking

Mondays 17:30-19:00 - 20:30 MCD120

Instructor: Ivan Stojmenovic ivan@site.uottawa.ca www.site.uottawa.ca/~ivan

Course description:

Self-organized, mobile, and hybrid ad hoc networks. Physical, medium access, network, transport and application layers, and cross-layering issues. Bluetooth and IEEE 802.11. Power management. Security in ad hoc networks. Topology control and maintenance. Data communication protocols, routing and broadcasting. Location updates for efficient routing.

Textbook and notes:

Course is based on slides used in class, and given on website. There is no mandatory textbook, except possibly separate chapter(s) as part on project and presentation. Slides are designed based on the following textbooks by instructor (and some book chapters and surveys on website):

Mobile Ad Hoc Networking, (S. Basagni, M. Conti, S. Giordano, I. Stojmenovic, eds.),
IEEE Press/Wiley, August 2004.

Handbook of Sensor Networks (I. Stojmenovic, ed.), Wiley, September 2005.

A. Nayak and I. Stojmenovic, ***Handbook of Wireless Sensor and Actuator Networks***, Wiley, 2010.

Marking scheme:

- 15% Attendance and in class discussion
- 10% Presentation in class
- 10% quality of three proposed questions and answers
- 20% Quiz 1
- 15% Quiz 2
- 30% Project report