CSIS 633 **Semantic Web Principles and Practice** **Fall 2011**

Syllabus

Instructor

Dr. Jim Bowring http://www.cs.cofc.edu/~bowring/

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Office hours: TWR: 11:00 – NOON or by appointment; M (LGC): 4:30-5:30

Class place and time

Classroom: Lowcountry Graduate Center, Room 114
Time: M 5:30 – 8:30 PM

Catalog description

CSIS 633 Semantic Web Principles and Practice: This course covers the emerging technology supporting the Semantic Web with machine-processable content. Students will engineer and implement ontologies, associated metadata and logical inference systems. Covered are specialized languages such as Extensible Markup Language (XML), Resource Description Framework (RDF), and Ontology Web Language (OWL) and query associated query languages.

Required texts

Semantic Web for the Working Ontologist (2nd ed). Allemang and Hendler. Elselvier 2011.

Semantic Web Programming. Hebeler et al.. Wiley 2009.

Electronic Resources

1) Class Website: http://stono.cs.cofc.edu/~bowring/classes/csis%20633/fall%202011/csis-633-fall-2011.html
2) Google Scholar
3) The College of Charleston Libraries supply free full access to a wide range of electronic resources, including the ACM Digital library and the IEEE Computer Society Journals.
4) Center for Student Learning
5) Protege Ontology Editor http://protege.stanford.edu/
   Jena Semantic Web Framework 2.5.6 http://jena.sourceforge.net/
   Pellet http://clarkparsia.com/pellet/download

Learning Objectives

The principal objectives of this course are to train you in the engineering and implementation of ontologies for the Semantic Web. The topical areas include:

Structured Web Documents
Resource Description Framework
Web Ontology Language
Logic and Inference
Applications
Ontology Engineering
Modeling

Professional Development
highly recommend that you join either the Association for Computing Machinery (ACM = $19 for a student) or the Institute of Electrical and Electronics Engineers (IEEE) Computer Society. Both offer student memberships. We have a College of Charleston student chapter of the ACM, which you are encouraged to join and attend. In your professional career as a business informatics specialist, your employers will likely expect you to maintain one or the other of these memberships.

Attendance and class participation
Your active participation will lead to your success and to the success of the class. I expect you in class on time and well-prepared by having read the assigned readings. Some graded assignments will be done in class. You will give a 5 to 10-minute oral presentation as part of your project.

Homework and assignments
All assignments are due at the beginning of class on their due date. Unless otherwise specified, you will submit each assignment electronically. I require professional-grade documents containing identifying information as well as the work itself.

Classroom disruption
Please read the College of Charleston's Student Code of Conduct. When you come to class please turn off your cell phones and all other electronic communication devices.

Disabilities
If you have a documented disability and are approved to receive accommodations through SNAP Services, please contact me during office hours or by appointment.

Student Honor Code
I expect you to abide by the Honor Code and the Student Handbook: A Guide to Civil and Honorable Conduct. If you have a question about how to interpret the Honor Code, ask before acting! Each student will submit their own work and, when collaborating, provide a reference to those people and documents consulted.

Grading scale
Superior (A); Good (B); Acceptable (C); Not Acceptable (F)

Evaluation schedule

40%	Exams and quizzes
40%	Assignments and projects
20%	Class participation including presentations