CSIS 690₍₆₃₃₎ N90 <u>Semantic Web Principles and Practice</u> May Evening 2009 Syllabus

Instructor

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

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Email: Please use BowringJ@cofc.edu with Subject = "CSIS690" for a response within

24 hours. I reserve the right to ignore other Emails.

IM: Google chat: bowring@gmail.com

Office hours: by appointment

Class place and time

Classroom: Lowcountry Graduate Center, Room 114

Time: MW 5:30 - 8:30 PM

Catalog description (633 is the planned future number for this course)

<u>CSIS 633 Semantic Web Principles and Practice</u>: 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. Dean Allemang and Jim Hendler. Elselvier 2008.

A Semantic Web Primer. Grigoris Antoniou and Frank Van Harmelen. MIT Press 2008.

Electronic Resources

- 1) Class Website and electronic group
- 2) Google Scholar
- 3) The College of Charleston <u>Libraries</u> supply free full access to a wide range of electronic resources, including the <u>ACM Digital library</u> and the <u>IEEE Computer Society Journals</u>.
- 4) Center for Student Learning

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

We highly recommend that you join either the Association for Computing Machinery (ACM) 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 (free, with free food) and attend. In your professional careers as business informatics experts, you should maintain one or both of these memberships.

Attendance and class participation

I expect you to attend and participate in every class session. Your active participation will lead to your success and to the success of the class. I expect you in class on time and prepared by having read the assigned readings. Class participation counts as 20% of your grade.

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 <u>Student Code of Conduct</u>. 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 <u>Honor Code</u> and the <u>Student Handbook: A Guide to Civil and Honorable Conduct</u>. 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); Very Good (B+); Good (B); Fair (C+); Acceptable (C); Not Acceptable (F)

Evaluation schedule

40% Exams (mid-term and final)
40% Assignments and projects

20% Class participation including presentations