

CIS 571 Syllabus (Winter 2009)

Web Services

1 General Information

- Professor – Dr. Brahim Medjahed.
- When – Wednesday, 6:10 pm - 9:00pm.
- Where – PEC 1420.
- Office Hours – Tuesday/Thursday 3:30pm - 5pm; Wednesday 3:00 pm - 6:00 pm; or by appointment.
- Office – CIS 242.
- E-mail – brahim@umd.umich.edu
- Phone – (313) 583 6449.
- Course URL – <http://www.engin.umd.umich.edu/~brahim/CIS571/CIS571.htm>
- Lecture notes, projects, and course material and information will be posted on VLT. Please register on VLT with the key 571W09.

2 Text Book

- Web Services by Gustavo Alonso, Fabio Casati, Harumi Kuno, Vijay Machiraju, Springer 2004 (ISBN: 3540440089)

3 Current Catalog Description

In this course, we study the major concepts and techniques for enabling Web service based interactions on the Web. The objective is to familiarize the students with the recent trends in industry and academia to address Web service research issues. The course will address various aspects of Web services including the reference model for Web services (UDDI, SOAP, WSDL), Web service composition, semantic Web services, security/privacy in Web services, and overview of Web service standards (BPEL4WS, WS-Security, etc.) Participation in major projects is at the core of this course.

4 Course Objective

The objective of this course is to familiarize the students with the recent trends in industry and academia to address Web service research issues. The aim is to get the students more involved in one or more of the topics related to Web services.

5 Course Policy

- All students must respect the *statement on academic conduct* (please, see Section 14).
- Please read you UMD email regularly for announcements.
- You are expected to return your assignments at the due date (**before 5:30pm**). Late assignments (project, presentation) will be penalized 5% off for each late day.

6 Interaction

I will create a topic in VLT's question board about each topic/chapter. Students are encouraged to actively participate in the question board by submitting questions, answers, useful links, etc. related to each topic.

7 Projects

Participation in projects is at the core of this course. There will be three (3) projects. All projects are individual. At the end of the project, each student will have to

- Submit a report describing the design of his/her project (no more than 6 pages: single-space, 1 inch margins).
- Present a project demo showing the major features of his/her implementation (no more than 10 minutes). In the third project, each student will need to prepare a poster for her/his project.

ALL projects should be implemented using Windows Server (preferably Windows 2003 server) as operating system (because of access to UDDI server) and visual studio development environment. You can use the programming language of your choice.

You can get both software (Windows 2003 server and visual studio) for free from the department. You will need to stop by CIS office (CIS 105) as soon as possible to fill out the necessary form. You will be given a password to download the software. Distance learning students who cannot make it to campus should send an email to Kate Markotan (tabatha@umd.umich.edu) about that. I would strongly advise students to get the passwords and start installing the software before the first project is posted (i.e., January 21st, 2009).

As for installing Windows 2003 server, you have the following two options:

- Have a dedicated PC/laptop where you would install Windows 2003 server as the only operating system.
- If you already have another operating systems (e.g., XP) in you PC/laptop, you can create a virtual a machine in which you will install windows 2003 server.

8 Paper Summaries

The instructor will provide a list of papers that cover the course topics. Each student will have one (1) paper assigned to her/him. The list of papers will be posted in the VLT. Each student will have to submit a 2-page summary about the paper. The summary should NOT be a copy-and-paste from the paper. I will post a summary template later on.

9 Guest Speakers

We will have guest-speakers from local companies who will talk about the use of Web services and SOAs (Service-oriented Architectures) in the industrial/business world. The names, dates, and topics of the presentation will be posted later on.

10 Main Topics

The course will focus on the following topics:

- XML and XML Schema.
- Introduction to Web Services.
- Reference model for Web services (UDDI, SOAP, WSDL).
- Web service composition.
- Web service coordination.
- Security in Web services.
- Overview of Web service standards (BPEL4WS, WS-Policy, etc.)

11 Grading

The course has no mid-term or final exam. The grading will be based on paper presentations and projects:

- Paper Summary: 5%.
- First Project: 30%.
- Second Project: 30%.
- Third Project: 35%.

12 Important Dates

- Project 1
 1. Posted: January 21st, 2009
 2. Due: February 25th, 2009

- SPRING RECESS: March 1 - March 8
- Project 2
 1. Posted: February 25th, 2009
 2. Due: March 25th, 2009
- Project 3
 1. Posted: March 25th, 2009
 2. Due: April 29th, 2009 (final exam day)
- Paper Summary
 1. Posted: February 25th, 2009
 2. Due: March 11th, 2009

13 Disability Resource Services

The University will make reasonable accommodations for persons with documented disabilities. Students need to register with Disability Resource Services (DRS) every semester they are enrolled for classes. DRS is located in Counselling & Support Services, 2157 UC. To be assured of having services when they are needed, students should register no later than the end of the add/drop deadline of each term.

14 Statement on Academic Conduct

The University of Michigan - Dearborn values academic honesty and integrity. Each student has a responsibility to understand, accept, and comply with the university's standards of academic conduct as set forth by the Code of Academic Conduct, as well as policies established by the schools and colleges. Cheating, collusion, misconduct, fabrication, and plagiarism are considered serious offenses. Violations will not be tolerated and may result in penalties up to and including expulsion from the University.