

CIS 8020 SYSTEMS INTEGRATION FALL 2009

CATALOG DESCRIPTION

This course focuses on the integration of information systems in organizations, the process by which different computing systems and software applications are linked together physically or functionally. It examines the strategies and methods for blending a set of interdependent systems into a functioning or unified whole, thereby enabling two or more applications to interact and exchange data seamlessly. The course will explore tools and techniques for systems integration as well as proven management practices for integration projects.

COURSE OBJECTIVES

Upon completion of this course, students should be able to:

- Understand basic concepts, methods and technologies related to system integration
- Identify commonly used tools for integrating information systems, describing the benefits of using each.
- Explain alternative strategies for systems integration.
- Explain how service oriented architecture can aid in systems integration, identifying the underlying tools and technologies that facilitate the creation of such services.
- Analyze the problem and design feasible integration solutions to address the problem.

INSTRUCTOR INFORMATION

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Office Hour:

Monday 1:00PM – 3:00PM

Tuesday 8:00AM – 9:30AM, 11:00AM – 12:00AM, 2:00PM – 6:00PM

Wednesday 1:00PM – 3:00PM

Thursday 8:00AM – 9:30AM, 11:00AM – 12:00AM

WEBSITES

General teaching info/blog site: <http://cis8020.blogspot.com>

Course content website (login): <http://myrobinson.gsu.edu>

My personal website: <http://gzheng.cis.gsu.edu>

Note: the blog site is the main website used for this course. All announcements, course materials and contents will be organized as blog entries or gadgets. Please follow the site closely or sign up for the RSS feed. The site serves a second purpose to be an example for your blog site development.

GRADING

Grading Item	Percentage
Group Presentation and Discussion Leading (2)	30%
Group Project on System Design	25%
Group Project on Blog Site	20%
Assignment/Exercise (3)	15%
In-class Participation	10%
Total	100%

BRIEF DESCRIPTION

One group consists of three students, (ideally) with different background and technology proficiency.

Group presentation and discussion leading: each group will select two specific topics (corresponding to the schedule), do some research, present it in class and lead the discussion.

Group project on system design: each group will identify an integration problem in a particular domain (real or simulated), analyze the problem, propose and design the potential solution using technologies, techniques and products discussed in class. You don't have to develop and implement a real running system prototype; but you need to discuss its feasibility.

Group project on blog site: every group needs to set up a group blog site on blogspot.com. Each group needs to write blogs related to their selected topics (but not limited to). In addition, there are many tools in blogspot.com that you can use to integrate various content and applications on the web. Each group should try their best to develop the blog site.

Assignment/Exercise: there will be three individual exercises/assignments on utilizing integration technologies.

In-class participation: this is based on student participation in discussions.

Blogging participation: this is based on your comments on other's blog.

BONUS POINT (1% EACH)

- The top 3 blog entries which receive the most comments
- The group with the best blog site based on student votes at the end of the semester

BOOKS

- [Wiley] Enterprise Application Integration: A Wiley Tech Brief by William A. Ruh, Francis X. Maginnis and William J. Brown, John Wiley & Sons © 2001 (books24x7)
- [IBM] The New Language of Business: SOA & Web 2.0 by Sandy Carter, IBM Press © 2007 (books24x7)
- [Packt] SOA Approach to Integration: XML, Web Services, ESB, and BPEL in Real-World SOA Projects, by Matjaz, B. Juric et al., Packt Publishing © 2007 (books24x7)