SYS 2004
Data and Information Management
Spring 2015

Instructor Information

Susan K. Donohue, Ph.D.
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Office hours are Tuesdays, 3 - 4:30 pm and Wednesdays noon – 1 pm in Thornton B204 and by appointment.

I will read and respond to email, for the most part, between 10 am and 8 pm during the week, and noon – 5 pm on weekends. If you need an immediate answer, please call or text my cell before 8 pm.

TA Information

Hassan Jafarzadeh
Olsson 228D
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Office hour is on Mondays, 1:30 - 2:30 pm in the common area of OLS 228.

Course Materials

There is **NO TEXTBOOK TO BUY**. Instead, selected readings will be posted to the course Collab site.

Course Description

This course provides students with the knowledge, skills, and abilities required to identify, gather, model, store, manipulate, and exchange data in order to support decision-making processes. It incorporates both conceptual bases and corresponding technology standards, including Unified Modeling Language (UML), SQL, and XML. We cover the development of conceptual models for describing data and their relationships; relational databases; effective use of SQL for data definition and manipulation; and the major components of modern information systems.

From the catalogue: Introduces the integration and acquisition of information for decision-making using information technology. Discusses the impact of rapid software and hardware development on information integration, including the essential methodologies of client server and database systems. Topics include the design and analysis of relational database systems, exposure to Microsoft Access and the fourth-generation language SQL, and critical topics in data and information management such as project management, data mining, big data, data storage, and data visualization.

This course is not intended for systems engineering majors. **Students may not receive credit for both SYS 2202 and SYS 2004**. Prerequisite: CS 1010, ENGR 1620, or instructor permission.

Course Goals

You will have the knowledge, skills, and abilities to develop, maintain, and query relational databases by the end of the semester. You will also be introduced to the field of project management, enhance your data literacy and investigate current (ethical) issues in data and information management…and have a positive learning experience in the attainment of these goals.

Course Schedule and Assignments

The Course Schedule is maintained in a separate document. The schedule lists discussion topics and assignments and their due dates. Additional details on the assignments will be provided in the class notes. The schedule does **not** include participation exercises.

Course Policies

Attendance

Attendance is **required**, since attending class gives you the opportunities to develop the skills needed to complete course deliverables as well as earn participation points. Please email or call me if you know about an absence in advance, or if you anticipate an absence of two or more consecutive class periods. Please factor this information into your spring break and end-of-semester plans. Due date extensions will **not** be given if the absence is due to non-essential travel plans.

Please be prompt to class. Late entrances disrupt class activities.

Communication Device Use

Please have your cell on vibrate during class and conferences with the instructor and teaching assistant. Please let the instructor if you have an emergency situation for which you need to be reached during the class. iPods or other music delivery devices may be used when you are working on your own; please turn off your device during lectures, discussions, and group work. Similarly, please use your laptop / tablet / phone during lectures and discussions for non-trivial

uses (e.g., taking notes or pictures of the blackboard) ONLY. Such use should be brief and unobtrusive.

Please don't text, Internet surf, work on assignments for other classes, or IM/Google chat during class. If you do, you will be asked to leave and you will receive a zero (0) for the day's activities.

Cooperative Learning

We will be doing a good deal of work in teams. Cooperative learning gives you an opportunity to pool knowledge and talents, and learn from your peers. A team will turn in one product and share the grade. The expectation, therefore, is that team members will contribute equally to the final product. Team members will manage, with assistance from me as requested, situations when contributions are not equal. There will be individual work products due during the semester as well. The expectation in this case is that you will complete that product on your own. And you know what? The best resource/help may often come from your fellow student(s).

Lecture Notes

My goal is to have student lecture notes available by 10 pm the night before scheduled delivery. Please note that, at times, these notes will be an abbreviated version of the notes from which I'll work. There is pedagogic value in both providing a framework within which students take notes and the activity of note taking. Full notes will be posted after class.

Miscellaneous

You will adhere to all UVa guidelines and policies with respect to cheating, plagiarism, and other forms of academic dishonesty. **Any assignment whose integrity is compromised will receive a 0. You will pledge all work.** We are proud of our honor system; it is integral to the intellectual and social development of our educational community. Please let me know immediately if you have any question that honor may have been compromised, or if you're unsure as to whether a certain action is a violation of the honor code.

You will conduct yourself in a professional, respectful manner in all interactions with the instructor, fellow students, and other faculty and staff. We pledge to do the same.

Please don't wait to address any performance issues.

Emails to me **must** have SYS 2004 in the subject line. I will follow this rule for all class emails.

I will post all Office files in their 2003 versions (that is, with extensions of .doc, .xls, and .ppt) to ensure that everyone can read and use them easily. Please let me know if you have access only to iWork, and I'll post Keynote versions as well.

DO NOT email me your assignments.

"Outside" work will be required to complete readings and assignments, and to conduct research. The time commitment will vary, but do plan on at least two hours per week.

Use the American Psychological Association (APA) style in citing references in your assignments.

Please notify me as soon as possible if any accommodations need to be made to meet differing abilities.

Please note: the class schedule is subject to change.

Late Assignment/Quiz Policy

Assignments are due by 11:55 pm on the date specified in the schedule unless you have negotiated otherwise with the instructor in **advance**. Assignments turned in late **without prior permission** will be penalized 10% of the assigned points each day past the due date, and will be given a grade of 0 if still outstanding a week after the due date.

You may take quizzes after the stated deadline under the same penalty structure as assignments: will be penalized 10% of the assigned points each day past the due date/time, and will be given a grade of 0 if still outstanding a week after the due date/time.

Each student will get one mulligan per semester with respect to a late assignment or quiz.

Course Assessment (Grading)

SYS 2004 is primarily a project-based course. The contribution weights are:

15%	Participation/Attendance/In-Class Assignments
15%	Online Quizzes
30%	Homework
40%	Course Project

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