

Syllabus

Issues in Cloud Computing INLS 690 Cloud Computing, Spring 2015

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Office Hours: Monday, after class and by appointment

This will be a reading intensive class. I will expect that you have read *ALL* the week's readings. It will also expect that you come to discuss those readings

COURSE DESCRIPTION

We will then examine the technical characteristics and the business reasons for cloud computing. We will discuss common commercial and open source offerings. Emphasis will be placed on cloud answers to common business computing issues, like scalability of processing and storage, security, relational and other database models, and library and other information systems. What impact does virtualization have on performance? How do cloud providers schedule, monitor and provision services? When data are stored in the cloud, what steps can be taken to ensure the privacy of that data and to reassure users that their data will not be inadvertently released to others? And, given the range of students we have in this course, how do we interface with the wide range of users and issues to be found in "the real world"?

PRE-REQUISITES AND CO-REQUISITES

This is an advanced course. You are expected to have or acquire a broad background in computing.

COURSE OBJECTIVES

This course is a broad introduction to cloud computing. The course and its readings will be based (loosely) on the *ACM Tech Pack on Cloud Computing*. Many (most) of these readings are *highly* technical. If you are not prepared to slog through these papers, you should drop the course. In addition to this, we will also discuss the business/organizational, societal and other issues surrounding the Web and its "cloud". This means that the course will take what is state of the art in cloud computing and then look at how this can (or cannot) benefit commercial and not-for-profit organizations.

When you have finished this course, you should expect to be able to:

1. Apply cloud issues to organizational needs
2. Evaluate cloud products
3. Lead cloud projects in your organization

4. Make cost benefit analyses for cloud projects in your organization

We may get to do more, but the above is a minimum at which I am aiming.

WEEKLY READINGS

Weekly readings will be shown in the course schedule.

Please keep up with the readings. You are expected to have read all the required (and some of the supplemental) by or before the first class meeting of that week.

WEEKLY “DOINGS”

I expect the class to be interactive. I do not expect to lecture for much of the class, only to lead discussion (and perhaps answer some questions). You are expected to ask questions, lead discussions, and make presentations.

METHOD OF EVALUATION

Final Project and Presentation

The project will be a research paper *or* a project proposal for an organization for which you now work or for which you have worked in the past. You will be expected to have finalized on a topic by the end of Week 3. You will present your findings in the last week of two of class. The presentation, based on the project paper, should be using slides or a video. It should be approximately 20 minutes. Exact dates will be determined. The students will be expected to formally present their progress in class on Weeks 8.

The final paper should be 15-20 pages excluding references, 12 point Times New Roman, 1.5 spaced, and standard margins. Please don't play games with formatting. It will be due the Friday after the last class meeting (April 29, 2016). Lastly, ***and please note this***, I expect $\frac{3}{4}$ of your references to be from peer reviewed (though not necessarily computer science) sources. Only $\frac{1}{4}$ of these sources may be from Web sites, newspapers and magazines, or “trade rags”. And yes, I will be counting. Please ask me if you are unsure about a source.

Leading Class

Each of you will be required to lead the class discussion several times. That means, you will be expected to read not only the assigned readings for the week but also one or more additional articles. You will be expected to post those readings by the Friday *before* you lead the class.

Class Participation

Class participation will be determined by attending class and asking and answering questions in class. Since this will be a small class, presence or absence, contributing or quiet, will be pretty evident.

Exams

There will be a final exam. It will consist of 10 TRUE/FALSE questions. (I'm tired of arguing with admin.)

Turning in Final Projects Late

I will first grade you project. Then I will deduct 1 grade for every day that they project was turned in late. Since no one will turn in their projects late, however, I do not expect this to be an issue.

Class Attendance

If you don't attend class, you can't get class participation credit. It will be your responsibility to get any material covered in a missed class from a fellow student. I won't go over it with you. If you regularly miss class, please don't be surprised if you get a grade with which you are unhappy.

GRADING

Class Participation	10 points
Leading Class	35 points
Final Exam	05 points
<u>Final Project & Presentation</u>	<u>50 points</u>
Total:	100 points

Standard SILS and UNC grading breakdowns apply. Doing only what is required for each project will get a P for graduates or a B- for undergraduates. To get a higher grade, a student's work must demonstrate that it goes beyond the minimum requirements.

CLOSING REMARKS

I will do my best to answer your questions as they come up, but that doesn't mean that you should not disagree with my answer. I am, as I said, a guide, not a dictator. I may not know the answer to a question. In that case I will say, "I don't know" and find the answer for you.

Lastly, please turn in all work on time, having said that, I am not a monster. I have had students who have a death in the family, a diagnosis of breast cancer, going through an ugly divorce (are there any other kind?), so, if you have a problem, contact me immediately. If you contact me at the last minute, I won't be able to help you.

Oh, bye-the-bye, this course starts January 11, 2016 and the last class is April 25, 2016. When I reference a week in the course, don't ask me what date that is. If you don't know, you should invest in a new invention called a "calendar".

HOW TO CONTACT ME

You have my email address, if you need to contact me quickly, use email. I should be online most days. Please don't post to Sakai's drop box. I only occasionally look there.

Let me repeat, if you are having problems, CONTACT ME!!!! You are not paying tuition for my good looks, however good they may (or may not) be. If you don't contact me, then please don't complain about your grade. Real education is an interactive process.

STUDENTS WITH SPECIAL NEEDS

If you have any special need, the first place you should check is <http://library.law.unc.edu/students/information/disabilities/default.aspx>. If you have a special need, then get help. Keep me in the loop. I have a special need, too. I am bald and I need a hat in sunny summer days and cold winter ones. You getting help for a special need is no bigger a deal than me wearing a hat in the summer. Seeking help for a disability is not asking for something extra, it is simply asking for the playing field to be level. I like level. Level is good.

CHEATING AND PLAGIARISM

You are expected to do your own work. Cheating in any form (including using other people's work with out proper citations--i.e. plagiarism) or getting someone or something else (code generators) to do your work will result in the student being given an F for that instrument. The second offense, the student will be given an F for the course.

Having said that, I expect you do search online resources *extensively*. Just make sure you cite them properly.