CS 499 – Distributed Systems  
Monday, August 24, 2009

Course Website: http://flagstaff.cse.nau.edu:25176/teaching/  
>> CS 565  
Instructor: Dr. Wolf Dieter Otte

Notes:

* Distributed systems – when computers rely upon another one in sync to function.
* This course is meant for Graduate Course Level. They tend to have more rigors. Graduates have to perform some services in teaching. This is why the course will be taught in a more strict way.
* Class Lectures on Monday and Wednesday, the topics seem to be focused on the theories of distributed systems. Friday will have more practical works and discussion about practical work.
  + Dr. Otte will conduct about three projects during the course of the class. The first project will be to design and implement a P2P system, a system that sends a message to all the others in a system.
  + The graduates will become leaders of undergraduates to create a team to complete the Projects.
* Topics: Research projects that will require teams to learn and present.
* Grading
  + Professional Paper 🡪 20%
  + Class presentation 🡪 15%
  + Team Projects 🡪 25%
  + Quizzes 🡪 10%
    - At least a quiz once a week
  + Midterm 🡪 10%
  + Final Exam 🡪 20%
* The Graduates are suppose to take more of an active lead in the class and are resource for the Undergraduates; they are teaching us.
* Q: Was there a pre-defined programming language set for the course?
  + No, there is no restriction for the projects on programming languages.
* Q: Can we be given virtual machines on your server for our project needs (sandboxing)?
  + Maybe. Dr. Otte will get back to us on if we will be giving us VM’s.
* Rough outline of the course can be found at the course website.
* Course Outline:
  + Introduction to distributed systems (1 week)
  + system models (2 weeks)
  + time and global states (3 weeks)
  + coordination and agreement (1 week)
  + transactions and concurrency control (3 weeks)
  + replication (3 weeks)
  + load balancing/distribution (1 week)
  + p2p networks (1 week)

TODO:

* Download/Print Syllabus
* Choose teams – composed of one Graduate student and three to four Undergraduates.
  + Team:
    - Graduate: Ryan Middleton, rmm34@nau.edu, 928-221-7210
    - Undergraduates:
      * Brian, bjc76 [at] nau.edu, 614-425-6054
      * Talbert, talbert.tso [at] gmail.com, 928-699-8755
      * Andy Arminio, aga7 [at] nau.edu, 928-707-0095
      * Bernie Citron, bc229 [at] nau.edu, 480-329-6054
  + First Assignment: P2P chat program
    - As of right now we will code in Java.
    - Team agreed to use subversion for our communication services.
* Review and update yourself with SOCKET programming.