Florida International University
School of Computing and Information Sciences

CEN 4083 — Introduction to Cloud Computing
Course Syllabus

Instructor

Ming Zhao, PhD
Lectures: Tue/Thu 9:30am - 10:45pm in ECS 235
Office: ECS 363/ECS 265
Email: ming@cs.fiu.edu
Office hours: Tue/Thu 3:30 - 4:45pm or by appointment

Course Materials

Videos will be available to FEEDS students (from both FIU and UCF) at http://netcast.cs.fiu.edu.

All other course materials will be available at http://moodle.cs.fiu.edu.

Non-FIU students shall access the online materials using their temporary FIU accounts.

Prerequisites

- Computer organization and data structures
- Java programming

Description

CEN 4083 covers the following topics:
- Introduction
    - Background and history of cloud computing
    - Cloud computing models
- Virtualization
    - Background and history of virtualization
    - Virtual machines, virtual networks, virtual storage
- Infrastructure as a Service (IaaS)
    - IaaS system architecture
    - IaaS programming
- Platform as a Service (PaaS)
    - PaaS system architecture
    - PaaS programming
- Big data
    - Big data system architecture
    - Big data programming

In addition, in collaboration with IBM, a leading public and private cloud service provider, the instructor will organize a ***Cloud Hackathon*** using IBM's industry-leading cloud platforms and resources.

In collaboration with Miami's local cloud computing companies, the instructor will try to arrange a ***field trip*** to their cloud datacenter facilities. Non-FIU students are welcome to join too.

Grading

Grading will be decided primarily based on 3 to 4 course projects. All projects shall be submitted via http://moodle.cs.fiu.edu.
There will be no exams.
There will be 5% to 10% of grade determined based on class participation.

Policies

Late submission of assignment will not be graded. There will be *absolutely no* exception unless it is due to *verifiable* cases of illness and emergencies.

All assignments must be done *independently*. Academic dishonesty will be treated *very seriously* according to the Student Academic Misconduct Procedures.