Course Information

Course Code 5710495
Course Section 1
Course Title CLOUD COMPUTING
Course Credit 3
Course ECTS 6.0
Prerequisites 5710331, 5710351
Schedule Monday, 12:40 - 14:30, BMB5
Wednesday, 12:40 - 13:30, BMB5
Website https://cow.ceng.metu.edu.tr/Courses/index.php?course=ceng495

Instructor Information

Name Dr. Cevat ŞENER
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Office Phone +90 312 210 5549
Office Hours Wednesday, 10:30-11:30

Course Assistant

Name Ercan Selçuk BÖLÜKBAŞI

Course Objectives

This course aims to provide the background to the architecture, concepts, principles, models, techniques and current practices of cloud computing, and also to raise awareness of security and privacy issues in cloud environments. It involves hands-on assignments that will utilize the cloud technologies, such as virtual resources, application platforms, MapReduce, data stores etc. Hence, the students are expected to

- understand the core concepts and principles of cloud computing;
- gain experience in clouds by examining architecture and design of cloud platforms as well as by designing, constructing and deploying applications on cloud platforms; and
- understand the available techniques and issues in cloud computing.
Tentative Weekly Outline

Introduction: History, concepts, principles, benefits
Cloud Platforms
Distributed System Models and Enabling Technologies
Virtual Machines and Virtualization
Cloud Platform Architecture over Virtualized Data Centers
Service-Oriented Architectures for Distributed Computing
Cloud Programming and Software Environments
Cloud applications and Multi-tenancy
Cloud storage and NoSQL
MapReduce

Reading(s)

Course Grading

<table>
<thead>
<tr>
<th>Attendance and Participation</th>
<th>4%</th>
<th>Throughout the semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment 1</td>
<td>13%</td>
<td></td>
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<tr>
<td>Assignment 2</td>
<td>14%</td>
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</tr>
<tr>
<td>Assignment 3</td>
<td>13%</td>
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<tr>
<td>Midterm Exam</td>
<td>27%</td>
<td>4-April-2019, Thursday</td>
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<td></td>
<td></td>
<td>(tentative, to be fixed and announced by the Dept.)</td>
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<tr>
<td>Final Exam</td>
<td>29%</td>
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</tbody>
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Course Policies

Class Attendance
Attendance & Participation is encouraged and supported by the grading policy.

Late Submission of Assignments
A penalty of $5 \times \text{LateDay}^2$ is applied for the late submission of the assignments for at most 3 days unless otherwise is stated.

Make up for Exams
Makeup exam is possible only if a legal documented excuse (e.g. medical report approved by METU Medical enter) is provided.

Final Exam Entrance Conditions
In order to be allowed to take the final exam, students MUST score weighted total of at least 30% from the Attendance & Participation and the Assignments graded.

Other
No grouping or cooperation is allowed for the assignments unless otherwise stated.
The university regulations will be applied in case of cheating on attendance, assignments, exams, etc.