



Jordan University of Science and Technology
Faculty of Computer & Information Technology
Computer Information Systems Department

CIS476 Cloud Computing

Summer Semester 2020-2021

Course Catalog

3 Credit Hours. This course introduces students to the fundamentals of cloud computing and software development for cloud platforms. It covers topics such as virtualization, the architecture of cloud systems, resource management, as well as privacy and security issues.

Text Book

| | |
|--------------------------|-------------------------------------|
| Title | Cloud Computing Theory and Practice |
| Author(s) | Dan Marinescu |
| Edition | 2nd Edition |
| Short Name | Dan |
| Other Information | |

Course References

| Short name | Book name | Author(s) | Edition | Other Information |
|------------|---|-----------|-------------|-------------------|
| Hwang | Cloud Computing for Machine Learning and Cognitive Applications | K. Hwang | 1st Edition | |

Instructor

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|-----------------|--|
| Name | Dr. Ahmad Mustafa |
| Office Location | - |
| Office Hours | Sun : 12:00 - 13:00 Mon : 12:00 - 14:00 Tue : 12:00 - 14:00 Wed : 12:00 - 13:00 |
| Email | ammustafa@just.edu.jo |

| Class Schedule & Room |
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| Section 1: Lecture Time: Sun, Mon, Tue, Wed : 08:30 - 10:00 Room: 150 منصة الكترونية |

| Prerequisites | | |
|---------------|--|----------------------|
| Line Number | Course Name | Prerequisite Type |
| 1744411 | Clis441 Data Communication And Computer Networks | Prerequisite / Study |

| Tentative List of Topics Covered | | |
|----------------------------------|---|------------------------------------|
| Weeks | Topic | References |
| Weeks 1, 2 | Introduction | Chapter 1 From Dan |
| Weeks 2, 3 | Cloud Service providers and the Cloud Ecosystem | Chapter 2 From Dan |
| Weeks 3, 4 | Cloud Data Storage | Chapter 6 From Dan |
| Weeks 4, 5 | Cloud Applications | Chapter 7 From Dan |
| Weeks 6, 7 | Cloud Resource Virtualization | Chapter 3 From Hwang |
| Weeks 7, 8 | Cloud Security | Chapter 11 From Dan |

| Mapping of Course Outcomes to Program Student Outcomes | Course Outcome Weight (Out of 100%) | Assessment method |
|---|-------------------------------------|----------------------------------|
| Describe the key concepts and technologies in cloud computing [1SO1] | 20% | Quiz 1, Assignment, Midterm Exam |
| Evaluate cloud computing technologies and platforms [1SO1, 1SO2] | 15% | Quiz 3, Midterm Exam |
| Design data storage components for cloud-based software systems [1SO2] | 15% | Quiz 2, Midterm Exam |
| Design, implement, and deploy cloud applications for cloud platforms [1SO1, 1SO2] | 15% | Final |
| Assess and monitor resource use of applications in virtualized environments [1SO2] | 20% | Final |
| Evaluate privacy and security issues for cloud infrastructure and cloud applications [1SO4] | 15% | Final |

| Relationship to Program Student Outcomes (Out of 100%) | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|-----|-----|-----|-----|-----|-----|
| A | B | C | D | E | F | G | H | I | J | K | SO1 | SO2 | SO3 | SO4 | SO5 | SO6 |
| | | | | | | | | | | | 35 | 50 | | 15 | | |

| Evaluation | |
|------------------------|---------------|
| Assessment Tool | Weight |
| Quiz 1 | 5% |
| Quiz 3 | 5% |
| Quiz 2 | 5% |
| Assignment | 5% |
| Midterm Exam | 30% |
| Final | 50% |

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