



INFO 3606: Cloud Computing

Semester II

Course Information

Lecturer:

Dr. Koffka Khan

Lecturer in Computer Science

Department of Computing and Information Technology (DCIT)

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Research: https://scholar.google.com/citations?user=y_8nPtWAAAAJ&hl=en;

https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=koffka+khan&btnG=

https://www.researchgate.net/profile/Koffka_Khan

Books: https://www.amazon.com/-/e/B09MMXJTKJ?ref_=pe_1724030_132998070

Department web-page: <https://sta.uwi.edu/fst/dcit/staff-profiles/Koffka-Khan>

Lectures:

Day	Time	Room
Wednesday	10:00 a.m. to 12:00 p.m.	TCB21

Tutorial:

Day	Time	Room
Monday	8:00 am to 10:00 am	CSL2

EVALUATION

100% Coursework

ESSENTIAL TEXTS/ MATERIALS

Lecture slides

FURTHER READING

Marinescu, D.C. Cloud Computing, Theory and Practice. Morgan Kaufmann.

Cloud Computing Fundamentals 1 Kindle Edition by Koffka Khan, URL:
<https://www.amazon.com/dp/BOB55HX639>

Cloud Computing Fundamentals 2 Kindle Edition by Koffka Khan, URL:
<https://www.amazon.com/dp/BOBRD9P4PN>

Cloud Computing: Concepts, Technology & Architecture (The Pearson Service Technology Series from Thomas Erl) 1st Edition, Kindle Edition by Erl Thomas

COURSE OVERVIEW

This course provides the student with an understanding of virtualization and its role in both private and cloud technologies. The student will be able to manage virtualization technologies and management of private and public cloud technologies. The course will be delivered using a combination of lectures, case studies and various online resources. Course deliverables will take the form of exams.

ASSESSMENT

Assessment	Weighting
	%
Coursework Exam 1	30%
Lab Assessment	30%
Coursework Exam 2	40%
TOTAL %	100%

LECTURES

The cloud paradigm has generated a tectonic shift in IT space. The extreme agility, adaptability, and affordability of cloud-enabled IT systems have substantially and strategically impacted business operations, offerings, and outputs. The goals of business automation and acceleration are being easily and

quickly met through various noteworthy advances in the cloud space. This course relates the story of the cloud computing journey and much more.

LECTURE CONTENT

1. Understanding cloud computing
2. Building clouds
3. Virtualization
4. Data storage and services
5. Understanding automation
6. APIs
7. Containers
8. DevOps
9. Cloud-native apps
10. Microservices
11. Application modernization

LAB

OpenStack is a free and open-source software platform for cloud computing, mostly deployed as infrastructure-as-a-service (IaaS), whereby virtual servers and other resources are made available to customers. The software platform consists of interrelated components that control diverse, multi-vendor hardware pools of processing, storage, and networking resources throughout a data center. Users either manage it through a web-based dashboard, through command-line tools, or through RESTful web services. *(Reference: From Wikipedia, the free encyclopedia, 2020)*

MISSED TERM WORK OR EXAMINATIONS

Students are expected to complete all assignments, tests, and exams within the time frames and by the dates indicated in this outline. Exemption or deferral of an assignment, term test, or final examination is only permitted for a medical and is ultimately based on the Lecturer's discretion. The lecturer must be notified by e-mail prior to the due date or test/exam date, and the appropriate documentation must be submitted. For absence on medical grounds, an official student medical certificate is required. Note that makeup exams are not automatic and is based on the Lecturer's discretion.

WHAT ARE THE RULES REGARDING PLAGIARISM AND CHEATING?

Plagiarism is the misrepresentation of someone else's work as your own. With the burgeoning amount of information available in print, on TV, and on the internet, the temptation to copy written, graphical or pictorial material into an assignment is very great. Yet this activity is morally and legally wrong. In lieu of formal disciplinary action, assignments containing plagiarized material will either be returned to the student with a mark of zero or returned for resubmission when rewritten in an original form satisfactory to the lecturer for marking, at the discretion of the lecturer. This does not preclude formal disciplinary action, which may include expulsion from the University. Students discovered cheating on an in-course test will normally receive a mark of zero for the test. Again, this does not preclude formal disciplinary action.

UWI Plagiarism Policy (*a Google Search will bring up this Policy*):

<https://sta.uwi.edu/fst/lifesciences/sites/default/files/lifesciences/images/plagiarism.pdf>

Individual Work Plagiarism Declaration Form (*a Google Search will bring up this Form*):

<https://sta.uwi.edu/fst/lifesciences/sites/default/files/lifesciences/images/Plagiarism%20Declaration%20Form.pdf>

Students **MUST** print and **FILL OUT** the Individual Work Plagiarism Declaration Form (link shown above) for **EACH** submitted assignment/project.

UWI STUDENT EMAIL

All students in full and part-time graduate and undergraduate degree programs and all continuing education students are required to activate and maintain their UWI online student email accounts.

UWI MyElearning

Course content will be placed on myElearning. Students who have not registered and who are not on myElearning will not be able to obtain grades until they are registered. Students are asked to visit myElearning regularly to view labs, course handouts and related material.

LATE ASSIGNMENTS/PROJECTS

Late assignments/projects will be given a mark of zero, unless supported with a medical certificate relaying that the student was in an unfit condition which prohibited assignment preparation.

IN-COURSE EXAMINATIONS

Because in-course grading is 100% those students who missed written exams are permitted a redo only with supporting medical documents. Note that a makeup exam is not automatic and is based on the Lecturer's discretion.

THE CODE OF PRINCIPLES AND RESPONSIBILITIES FOR STUDENTS

Hyperlink: <https://www.cavehill.uwi.edu/chol/documents/other-documents/uwi-code-of-principles-and-responsibilities.aspx>