



Course Specifications

Course Title:	System Administration
Course Code:	502420-3
Program:	Bachelor in Information Technology
Department:	Department of Information Technology
College:	College of Computers and Information Technology
Institution:	Taif University

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A. Course Identification

1. Credit hours:	3
2. Course type	
a.	University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered:	8/3
4. Pre-requisites for this course (if any):	502321-3
5. Co-requisites for this course (if any):	None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	8	100%
2	Blended	0	0
3	E-learning	0	0
4	Distance learning	0	0
5	Other	0	0

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	50
2	Laboratory/Studio	30
3	Tutorial	0
4	Others (specify)	0
	Total	80

B. Course Objectives and Learning Outcomes

1. Course Description

This course is an introduction to systems administration for Linux/UNIX family of operating systems. There will be hands on labs on Gnu/Linux. Topics to be covered include but not limited to the following: use of hard disk, system journals, basic shell scripts ...etc.

2. Course Main Objective

The main objective of this course is to:

- Use efficiently the hard disk (partitioning, formatting and mounting)
- Use system journals
- Install software
- Write basic shell scripts.
- Automate tasks using crontab.
- Solve boot problems in Linux systems.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	Knowledge and Understanding	
1.1	Master system components and architecture	K1
2	Skills :	
2.1	Explore useful tools and software	S1



2.2	Use processes and services	S1
2.3	Use efficiently the hard disk	S1
3	Values:	
3.1	Identify some system strengths and weaknesses	V1

C. Course Content

No	List of Topics	Contact Hours
1	System boot(installation, boot loader)	8
2	System services	3
3	Automating tasks(cron+at)	6
4	File System	6
5	Logical Volume Manager	6
6	Raid Software	3
7	Quotas Management	3
8	Syslog and Log Files	3
9	Software Installation and Management	3
10	Basic shell scripts	9
Total		50

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge and Understanding		
2.1	Master system components and architecture	Lecture Discussion Lab work	Written Exams Practical Exam
2.0	Skills		
2.1	Use processes and services	Lecture Discussion Lab work	Written Exams Practical Exam
2.2	Explore useful some tools and software	Lecture Discussion Lab work	Written Exams Practical Exam
2.3	Use efficiently the hard disk	Lecture Discussion Lab work	Written Exams Practical Exam
3.0	Values		
3.1	Identify some system strengths and weaknesses	Lecture Discussion Lab work	Writing Exam Practical Exam

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Mid Exam	8	20%
2	quiz	end of each chapter	10%
3	Labs	14	20%
4	Final Exam	16	50%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :



Academic advising and counseling of students is an important component of teaching; student academic advising is a mandatory requirement of College of Computers and Information Technology (CCIT). Appropriate student advising provides support needed for the student during times of difficulty. In addition, it helps the student to build a close relationship with his/her advisor and to provide student motivation and involvement with the institution.

In addition, since faculty are usually the first to recognize that a student is having difficulty, faculty members play a key role in developing solutions for the students or referring them to appropriate services. Faculty members also participate in the formal student-mentoring program.

Additional counseling is provided by course directors, who provide students with academic reinforcement and assistance and refer “at risk” students to the Vice Dean for Academic Affairs and the Vice Dean for female section.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	<p>UNIX and Linux System Administration Handbook, 4/E Evi Nemeth, <i>University of Colorado, Boulder, Colorado</i> Garth Snyder, <i>Seattle, Washington</i> Trent R. Hein Ben Whaley ISBN-10: 0131480057 ISBN-13: 9780131480056 Publisher: Prentice Hall Copyright: 2011</p>
Essential References Materials	
Electronic Materials	Presentation slides
Other Learning Materials	None

2. Facilities Required

Item	Resources
<p>Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p>	<ul style="list-style-type: none"> • A Lecture room appropriate for maximum 25 students with a personal computer, a data show and a smart board. • A Lab room appropriate for maximum 15 students with a personal computer, a data show and a smart board.
<p>Technology Resources (AV, data show, Smart Board, software, etc.)</p>	<ul style="list-style-type: none"> • Lab materials and required software
<p>Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)</p>	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
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Effectiveness of Teaching	Students	Students surveys and Students course evaluation
Improvement of Teaching	Course Coordinator	deficiencies based on the student Evaluation, faculty input, course file, and program assessment
Verifying Standards of Student Achievement	Curriculum Committee	<ul style="list-style-type: none"> Review CAF (Course assessment file) Alumni surveys. Periodic exchange and remarking of tests or a sample of assignments with staff at another

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	IT Department Council/ Executive program committee
Reference No.	11
Date	23/10/21443



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 Information Technology Department
 جامعة الطائف
 TAF UNIVERSITY



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