Kingdom of Saudi Arabia
National Commission for
Academic Accreditation & Assessment

المملكــة العربيــة السعوديــة
الهيئــة الوطنيــة للتقويــم
والاعــتــمــاد الأكــاديــمــي

ATTACHMENT 5.

Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

14014605-3 Forensics Computing

T6. Course Specifications
(CS)

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Course Specifications

Institution	Date 15/4/2016
	Umm Al Qura University
College/Department College of Computers and Information Systems/ Computer Science Department	

A. Course Identification and General Information

1. Course title and code: 14014605-3 Forensics Computing
2. Credit hours   3
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)   Computer Science
4. Name of faculty member responsible for the course   Dr. Sultan Almotiri
5. Level/year at which this course is offered 4th year / (level 9 or 10)
6. Pre-requisites for this course (if any)   14013602-3 Computer Security
7. Co-requisites for this course (if any)   None
8. Location if not on main campus Al-Abidiyah campus (Boys) and Al-Zaher campus (Girls), Makkah Al Mukarramah

9. Mode of Instruction (mark all that apply)

a. traditional classroom	✓	What percentage?	80%
b. blended (traditional and online)		What percentage?	
c. e-learning	✓	What percentage?	20%
d. correspondence		What percentage?	
f. other		What percentage?	

Comments:

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B Objectives

1. What is the main purpose for this course?
Securing relevant evidence from computer systems and other electronic devices requires a range of skills and a deep understanding of how data is stored and organized electronically. This course serves as an introduction to the technologies relevant to computer forensics and provides the student with hands-on experience collecting and analyzing electronic data. Upon completing this course, students will: 1. Understand the fundamentals of computer forensics   2. Understand the legal aspects of forensics   3. Understand the relationship between IT and forensics   4. Learn best practices for incidence response
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)   1. Increase the use of the latest Web-based reference material and textbooks.   2. Review and update the course materials as part of preparation to teach this course.   3. Gather students' opinions about their success in achieving course objectives by the end of the semester. This is done through number of survey questions that map one-to-one with course objectives.   4. Review and indicate which assessment instrument(s) to be used for assessing each course outcome, and what grading rubric will be used for each instrument.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
Introduction to Computer Forensics	1	3
• Understanding Computer Investigations • The Investigator's Office and Laboratory	1	3

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Data Acquisition	1	3
Current Computer Forensics Tools	1	3
Processing Crime and Incident Scenes	1	3
Digital Evidence Controls	1	3
Working with Windows and DOS Systems	1	3
Macintosh and Linux Boot Processes and File Systems	1	3
Recovering Image Files	1	3
Computer Forensics Analysis	1	3
Cloud and Network Forensics	1	3
E-Mail and Social Media Investigations	1	3
Becoming an Expert Testimony	1	3
Reporting Results of Investigations	1	3

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory or Studio	Practical	Other:	Total
Contact Hours	35	0	10	0	2 office hour per week	75
Credit	35	0	10	0	2 office hour per week	75

3. Additional private study/learning hours expected for students per week.	3

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1	Understand the fundamentals of computer forensics	lectures, e-learning, assignments	Quizzes, Assignments, Midterm Exam, Final Exam
1.2	Understand the legal aspects of forensics	lectures, e-learning, assignments	Quizzes, Assignments, Midterm Exam, Final Exam
1.3	Understand the relationship between IT and forensics	lectures, e-learning, assignments	Quizzes, Assignments, Midterm Exam, Final Exam
1.4	Learn best practices for incidence response	lectures, e-learning, assignments	Quizzes, Assignments, Midterm Exam, Final Exam
2.0	**Cognitive Skills**		
2.1	To enhance the students core ability to learn faster easier and better	lectures, e-learning, assignments	Quizzes, Assignments, Midterm Exam, Final Exam
2.2	Will acquire the ability to understand the threats and how to	lectures, e-learning, assignments	Quizzes, Assignments, Midterm Exam, Final Exam
3.0	**Interpersonal Skills & Responsibility**		
3.1	Self-Learning which will help students manufacture their own body of knowledge by allowing them to experience learning through task based activities	lectures, e-learning, assignments	Quizzes, Assignments, Midterm Exam, Final Exam
3.2			
4.0	**Communication, Information Technology, Numerical**		
4.1	Not applicable		
5.0	**Psychomotor**		
5.1	Not applicable		

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5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.)

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)										
	1.1	1.2	1.3	1.4	2.1	2.2	2.3	3.1	3.2	4.1	4.2	5.1
1.1	I											
1.2	I					I						
1.3	I			I								
1.4	I			I					I		I	
2.1	I											
2.2	I											
3.1	I											

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Attendance and class participation	1-15	5%
2	Quiz 1	2	2.5%
3	Assignment 1	3	5%
4	Quiz 2	4	2.5%
5	Assignment 2	6	5%
6	Midterm	8	25%
7	Quiz 3	9	5%
8	Assignment 3	11	5%
9	Quiz 4	12	5%
10	Final exam	16	40%

D. Student Academic Counseling and Support

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1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Every class is assigned 2 office hours per week..

E Learning Resources

| 1. List Required Textbooks |
| 1. "Digital Evidence and Computer Crime" (Third edition), Eoghan Casey, Elsevier Academic Press, 2011, ISBN 978-0-12-374268-1. |
| 2. "Guide to Computer Forensics and Investigations: Processing Digital Evidence", (Fifth edition), Bill Nelson, Cengage Learning,2015, ISBN 978-1-285-06003-3 |

2. List Essential References Materials (Journals, Reports, etc.)

Bunting, Steve, "EnCE - The Official EnCase Certified Examiner Study Guide," Sybex/Wiley Indianapolis, Third Edition, 2012, ISBN #978-0-470-90106-9

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

"Incident Response & Computer Forensics" (second edition), Kevin Mandia, Chris Prosise, and Matt Pepe, McGraw Hill/Osborne, 2003, ISBN 0-07-222696-X.

4. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

Forensic File System Analysis", Brian Carrier, through O'Reilly
Safari: http://proquest.safaribooksonline.com/0321268172

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

None

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

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1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) Lecture room (max 40 students) Computer lab (max 20 students)
2. Computing resources (AV, data show, Smart Board, software, etc.) Data Show, Smart board
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) Various forensic tools

G   Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching A student-feedback form is distributed at the end of the course.
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department University Course and Instructor Survey
3 Processes for Improvement of Teaching Review of curriculum and course. Coordination of instructors to improve the teaching quality.
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) Course file review

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5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

There are curriculum committee and Quality Assurance committee to review the course effectiveness.

Name of Instructor: Dr. Sultan Almotiri

Signature: Dr. Sultan Almotiri   Date Report Completed: 16th April 2016

Name of Course Instructor Dr. Sultan Almotiri

Program Coordinator:_____

Signature: _____   Date Received: _____