COURSE SPECIFICATIONS
Form

Course Title: Social Media Analytics

Course Code: 14016477–3

Date: 2018 −10 − 21.   **Institution**: Umm Al−Qura University
College: College of Computer and Information Systems **Department**: Department of Computer Science

A. Course Identification and General Information

1. Course title and code: <u>Social Media Analytics 14016477-3</u>
2. Credit hours: <u>3</u>
3. Program(s) in which the course is offered. <u>Master of Science in Computer Science</u> (If general elective available in many programs indicate this rather than list programs)
4. Name of faculty member responsible for the course <u>Dr. Murtaza Ali Khan</u>
5. Level/year at which this course is offered: <u>2</u>
6. Pre-requisites for this course (if any):
7. Co-requisites for this course (if any):
8. Location if not on main campus:

9. Mode of Instruction (mark all that apply):
  a. Traditional classroom   percentage?   100
 	
  b. Blended (traditional and online)   percentage?
 	
  c. E-learning   percentage?
 	
  d. Correspondence   percentage?
 	
  f. Other   percentage?
 	
Comments:

B Objectives

1. The main objective of this course This course provides theoretical and practical knowledge of social media data analysis.

2. Describe briefly any plans for developing and improving the course that are being implemented. (e.g. increased use of the IT or online reference material, changes in content as a result of new research in the field) The course will teach state of the art theoretical and practical knowledge in the field of social media analytics. Students will be required to use APIs of social media Websites such as Twitter, Facebook, Instagram to implement the assignment/project. At the end of the course, a seminar/presentation event will take place in which students will present their course projects/research work.

C. Course Description (Note: General description in the form used in the program's bulletin or handbook)

Course Description: The course covers concepts and techniques for retrieving, exploring, visualizing, and analyzing social network and social media data, website usage, and clickstream data. Students learn to use key metrics to assess goals and return on investment, perform social network analysis to identify important social actors, subgroups, and network properties in social media.

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Text Analytics on Social media	2	6
Network Analysis methods	2	6
Actions Analytics on social platform	2	6
Social Media Apps Analytics	1	3
Social Media Hyperlinks Analytics	2	6
Social Media Location Analytics	2	6
Social Media Search Engine Analytics	1	3
Aligning Social Media Analytics with Business Goals	2	6

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

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other	Total
Contact Hours	Planned	42					42
	Actual	42					42
Credit	Planned	3					3
	Actual	3					3

3. **Individual study/learning hours expected for students per week.**	9-12

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

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 targeted learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1	Understand the fundamental mathematical and computing principles of social media analytics	Lecture, Group discussion	Exams, Homework, Quizzes
1.2	Ability to apply knowledge of computing to write social media analytics code	Lecture, Group discussion	Exam, Homework, Quizzes
1.3	An ability to extract desired knowledge (e.g., business forecast) from social media networks such as Facebook and Twitter	Lecture, Group discussion	Exam, Homework, Quizzes
2.0	**Cognitive Skills**		
2.1	Apply conceptual understanding of social media analytics principles and theories	Lecture, Project	Exam, Homework
2.2	Implement and evaluate social media analytics process, component, or program	Lecture, Case studies,	Exams, Reports
2.3	Investigate the real-world problems in the context of social media analytics and design innovative solutions	Lecture, Project	Project Report, Project presentation
3.0	**Interpersonal Skills & Responsibility**		
3.1	Demonstrate own learning and professional development	Group discussion, Project	Project Report, Project presentation
3.2	Work effectively in groups to accomplish a common goal and show leadership qualities	Group discussion, Project	Project Report, Project presentation
3.3	Act ethically and responsibly with high moral standards	Lectures, discussion	Anti-plagiarism software, paper review, presentation
4.0	**Communication, Information Technology, Numerical**		

4.1	Ability to communicate clearly in oral and written form with range of audiences	Project	Project Report, Project presentation
4.2	Use of latest social media analytics tools	Lecture, Project	Project Report, Project presentation
5.0	**Psychomotor (if any)**		
5.1	Ability to operate and construct necessary tools required for social media analytics	Research activities, Projects	Project, Homework, presentations

5. Assessment Task Schedule for Students During the Semester			
	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	**Week Due**	**Proportion of Total Assessment**
1	Homework 1	2	5%
2	Quiz 1	3	5%
3	Homework 2	5	5%
4	Quiz 2	6	5%
5	Midterm Exam	8	20%
6	Project	10	30%
7	Final Exam	15	30%

D. Student Academic Counseling and Support

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

   i. Office Hours for student counseling and support – Three hours/week
   ii. Availability of teaching Staff on e-learning resources like uqu20/Piazza

E Learning Resources

1. List Required Textbooks

   i. Khan, Gohar F. Seven Layers of Social Media Analytics: Mining Business Insights from Social Media Text, Actions, Networks, Hyperlinks, Apps, Search Engines, and Location Data. CreateSpace Independent Publishing Platform, latest edition.
   ii. Tushar Sharma, Dipanjan Sarkar, Raghav Bali, Learning Social Media Analytics with R, Packt Publishing, latest edition.
   iii. Russell, Matthew A. Mining the Social Web: Data Mining Facebook, Twitter, LinkedIn, Google+, GitHub, and More. " O'Reilly Media, Inc.", latest edition.

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

   i. Recent Papers in Social Media Analytics related journals

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

   i. Facebook, Twitter to extract data and apply social media analytics.

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

   i. Twitter, Facebook APIs to be use in conjunctions of social media analytics tools

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.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

   i. One classroom (25 seats)
   ii. One lab (25 PCs)

2. Technology resources (AV, data show, Smart Board, software, etc.)

   i. Social media visualization software
   ii. Whiteboard
   iii. Internet connection

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

G   Course Evaluation and Improvement Procedures

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching

i.   At the end of semester, course evaluation forms will be filled by the students electronically or on paper. The evaluation forms will be anonymous.
2.   Other Strategies for Evaluation of Teaching by the Instructor or the Department
i.   Course file of the course will be maintained and evaluated by some senior faculty member.   ii.   Instructor evaluation is performed for every semester
3.   Procedures for Teaching Development   i.   Constant reading of new books and research papers, attending related conferences and workshops, participation in the research groups and blogs etc.
4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution)   i.   A random sample from the marked papers may be evaluated by an independent senior faculty member.   ii.   Departmental quality assurance committee can review the students grades and course files to make sure that high standard of teaching is maintained.
5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it.   i.   Department has curriculum committee that periodically review courses.   ii.   Faculty council review offer program as per need.

Name of Course Instructor: Dr. Murtaza Ali Khan

Signature: *Murtaza Ali Khan*   **Date Completed:** Oct. 22, 2018

Program Coordinator: _____

Signature: _____   **Date Received:** _____