MULTIMEDIA UNIVERSITY®

COURSE INFORMATION

1 .	**Name of Course**	Social Media Computing
2 .	**Course Code**	TDS3751
3 .	**Type of Course** **(e.g. : Core, major, elective etc.)**	Specialization Elective for BCS (DS) and elective for all other specializations
4 .	**Synopsis**	In this course, we study social media data to understand the relationship between users and the contents they share. Students willl learning to apply various techniques to process social media content to extract user opinion and examine social networks.
5 .	**Version** **(State the date of theSenate's approval - previous and the current approval date)**	Current: January 2018 Previous: June 2016
6 .	**Name(s) of Academic Staff**	Bhawani A/P S.Selvaretnam, Goh Hui Ngo, Soon Lay Ki, Ian Tan Kim Teck
7 .	**Semester and Year Offered**	Trimester 1 or 2 (Delta)
8 .	**Credit Value**	4
9 .	**Pre-Requisite**	TTDS3301 Data Mining

10 . **Objective of the course in the programme:**

To equip students with knowledge on social media characteristics and opinion mining. At the end of the course, students would have the required knowledge and skills to extract various insights from social media data.

11 . **Justification for including the course in the programme:**

To provide students with the ability to analyze data from social media sources.

12 .

Course Learning Outcomes (CLO)		**Domain**	**Level**
CLO1:	Discuss the characteristics of various social media sources.	Cognitive	2
CLO2:	Apply appropriate NLP techniques for processing social media data.	Cognitive	3
CLO3:	Examine relationships and their effects in social networks.	Cognitive	4
CLO4:	Design a solution for sentiment analysis on social media data.	Cognitive	6

13 . **Mapping of the Course Learning Outcomes to the Programme Learning Outcomes, Teaching Methods and Assessment:**

Course Learning Outcomes (CLO) (Must tally with CLOs in item 12)	**Programme Learning Outcomes (PLO)**												**Teaching Methods**	**Assessment Method**
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11	PLO12		
CLO1							✓						Lectures, Practical	Assignments, Quizzes
CLO2								✓					Lectures, Practical	Assignments, Quizzes, Lab Exercises, Presentation & Class participation
CLO3								✓					Lectures, Practical	Assignments, Quizzes, Lab Exercises, Presentation & Class participation
CLO4									✓				Lectures, Practical	Assignments,Lab Exercises, Presentation & Class participation
Total							**1**	**2**	**1**				*Indicate the relevancy between the CLO and PLO by ticking "✓" the appropriate relevant box (This description must be read together with standards 2.1.2, 2.2.1, and 2.2.2 in Area 2 – pages 16 & 18 of COPPA 2.0)*	

14 . **Transferable Skills:**

Transferable skills : analytical skills to extract and formulate insights from data
How is it developed : Through open ended assignments on real datasets
Assessment : Assignment presentation and written report

15 . **Distribution of Student Learning Time (SLT)**

	Course Content Outline	****CLO**	**Teaching and Learning Activities**				**Guided Learning (NF2F)***	**Independent Learning (NF2F)***	**Total SLT**
			Guided Learning (F2F)*						
			***L**	***T**	***P**	***O**			
1	**Social Computing & Social Media Landscape** Social Computing elements (social media, social networking, crowdsourcing, collective intelligence etc.); Functional building blocks of social media and its implications; Role of social media in businesses.	**CLO1**	2		2			4	8
2	**Social Media Characteristics & Metrics** Categories of social media; Varying format and content characteristics; Scorecarding.	**CLO1**	4		4			8	16
3	**Exploring Trending Topics** Sentiment Analysis; Types of opinion (explicit-implicit, regular-comparative) ; Levels of analysis (document, sentence, aspect, entity); Opinion summarization; Opinion Spam	**CLO2**	2		6		4	8	20

4	**Sentiment Analysis** Preprocessing; Syntactical analysis; Named Entity Recognition; Word sense disambiguation; Sentiment lexicon; Polarity and Sentiment Strength; Document sentiment classification; Sentence sentiment classification	**CLO4**	8		10		8	18	44
5	**Social Network connectivity and user influence** Network centrality metrics: degree, closeness and betweenness centrality; Information and influence propagation on networks	**CLO3**	6		6			12	24
								Total SLT	**112**

SUMMATIVE ASSESSMENT

1. Continuous Assessment	**Percentage %**	**Total SLT**
Lab Exercises	35%	8
Assignment	45%	28
Quizzes	10%	4
Presentation & Class participation	10%	8
	Total SLT for Continuous Assessment	**48**

2. Final Assessment	**Percentage %**	**Total SLT**	
		F2F	**ILT**
Final Exam	0%	0	0
	Total SLT for Final Assessment (F2F + NF2F)	**0**	
Grand Total	**100%**	**160**	

****Indicate the CLO based on the CLO's numbering in Item 12.**
***L= Lecture, *T= Tutorial, *P= Practical, *O= Others, F2F*= Face to Face, NF2F*= Non Face to Face**

16 . **Identify Special Requirement to Deliver the Course (e.g., software, nursery, computer lab, simulation room):**
Computer lab

17 . **Main References:**
N/A

18 . **Additional References:**

Sponder, M. (2013) Social Media Analytics: Effective Tools for Building, Interpreting, and Using Metrics. McGraw-Hill Professional
Russell, M.A (2014) Mining the Social Web: Data Mining Facebook, Twitter, LinkedIn, Google+, GitHub, and More. O'Reilly Media
Blanchard, O. (2011). Social Media ROI: Managing and Measuring Social Media Efforts in Your Organization. Pearson Education.
Wasserman,S and Faust, K (1994). "Social Network Analysis. Methods and Applications." Cambridge University Press.
Chen, W. et.al (2013). Information and Influence Propagation in Social Networks. Morgan and Claypool Publishers.

Note:

Cells shaded light grey contain formulas / fixed values. Edit these formulas only if needed.