

KING'S OWN INSTITUTE* Success in Higher Education



ICT733 SOCIAL WEB ANALYTICS T221 Brief

All information in the Subject Outline is correct at the time of approval. KOI reserves the right to make changes to the Subject Outline if they become necessary. Any changes require the approval of the KOI Academic Board and will be formally advised to those students who may be affected by email and via Moodle.

Information contained within this Subject Outline applies to students enrolled in the trimester as indicated

1. General Information

1.1 Administrative Details

Associated HE Award(s)	Duration	Level	Subject Coordinator
Master of Information Technology (MIT) Graduate Diploma of Information Technology (GDIT)	1 trimester	Postgraduate	Dr Mahdi Sak <u>mahdi.saki@koi.edu.au</u> P: +61 (2) 9283 3583 L: Level 1-2, 17 O'Connell St. Consultation: via Moodle or by appointment.

1.2 Core/Elective

This subject is:

- o an elective subject for the Master of Information Technology (MIT)
- an elective subject for the Graduate Diploma of Information Technology (GDIT) for students from a cognate background

Note: GDIT students from a non-cognate background do not have any elective subjects

1.3 Subject Weighting

Indicated below is the weighting of this subject and the total course points

Subject Credit Points	Total Course Credit Points	
4	MIT (64 Credit Points) GDIT (32 Credit Points)	

1.4 Student Workload

Indicated below is the expected student workload per week for this subject

No. Timetabled Hours/Week*	No. Personal Study Hours/Week**	Total Workload Hours/Week***
3 hours/week plus supplementary online material	7 hours/week	10 hours/week

* Total time spent per week at lectures and tutorials

** Total time students are expected to spend per week in studying, completing assignments, etc.

*** Combination of timetable hours and personal study

1.5 Mode of Delivery Online (face-to-face teaching temporarily suspended due to COVID-19)

1.6 Pre-requisites ICT713 Advanced Database Design and Development ICT731 Data Mining BUS708 Statistics and Data Analysis

1.7 General Study and Resource Requirements

 Students are expected to attend classes with the weekly worksheets and subject support material provided in Moodle. Students should read this material before coming to class to improve their ability to participate in the weekly activities.



- Students will require access to the internet and their KOI email and should have basic skills in word processing software such as MS Word, spreadsheet software such as MS Excel and visual presentation software such as MS PowerPoint.
- Computers and WIFI facilities are extensively available for student use throughout KOI. Students are encouraged to make use of the campus Library for reference materials.

Software resource requirements specific to this subject: Office 365, MS Imagine, Netlytic, Semantria, NodeXL, UCINET, Google (Analytics, Correlate, Fusion Tables, Trends), Count.ly, VOSON, and a range of other free services (e.g. Tweetreach).

Academic Details

2.1 Overview of the Subject

Social web analytics involves the extraction of valuable insights available from the large data sets associated with websites and social media in order to make informed business decisions. Students will learn how to systematically identify, extract, and analyse data using sophisticated tools and techniques. In addition to evaluating data to make better business decisions, students will learn how to communicate this information to varied audiences, including decision makers, who may only have a limited technical background.

2.2 Graduate Attributes for Postgraduate Courses

Graduates of postgraduate courses from King's Own Institute will gain the graduate attributes expected from successful completion of a postgraduate degree under the Australian Qualifications Framework (2nd edition, January 2013). Graduates at this level will be able to apply advanced body of knowledge in a range of contexts for professional practice or scholarship and as a pathway for further learning.

King's Own Institute's key generic graduate attributes for a postgraduate degree are summarised below:

	KOI Postgraduate Degree Graduate Attributes	Detailed Description
	Knowledge	Current, comprehensive and coherent knowledge, including recent developments and applied research methods
	Critical Thinking	Critical thinking skills to identify and analyse current theories and developments and emerging trends in professional practice
28	Communication	Communication and technical skills to analyse and theorise, contribute to professional practice or scholarship, and present ideas to a variety of audiences
	Research and Information Literacy	Cognitive and technical skills to access and evaluate information resources, justify research approaches and interpret theoretical propositions
A B B	Creative Problem Solving Skills	Cognitive, technical and creative skills to investigate, analyse and synthesise complex information, concepts and theories, solve complex problems and apply established theories to situations in professional practice
	Ethical and Cultural Sensitivity	Appreciation and accountability for ethical principles, cultural sensitivity and social responsibility, both personally and professionally
	Leadership and Strategy	Initiative, leadership skills and ability to work professionally and collaboratively to achieve team objectives across a range of team roles Expertise in strategic thinking, developing and implementing business plans and decision making under uncertainty
	Professional Skills	High level personal autonomy, judgement, decision-making and accountability required to begin professional practice

Across the courses, these skills are developed progressively at three levels:



- Level 1 Foundation Students learn the skills, theories and techniques of the subject and apply them in stand-alone contexts
- **Level 2 Intermediate** Students further develop skills, theories and techniques of the subject and apply them in more complex contexts, beginning to integrate the application with other subjects
- Level 3 Advanced Students have a demonstrated ability to plan, research and apply the skills, theories and techniques of the subject in complex situations, integrating the subject content with a range of other subject disciplines within the context of the course

Generally, skills gained from subjects in the Graduate Certificate and Graduate Diploma are at levels 1 and 2 while other subjects in the Master's degree are at level 3.

2.3 Subject Learning Outcomes

Listed below, are key knowledge and skills students are expected to attain by successfully completing this subject:

	Subject Learning Outcomes	Contribution to Course Graduate Attributes
a)	Identify and apply appropriate tools and techniques to analyse social media and website data from a variety of perspectives	
b)	Evaluate analysis reports in order to make informed business decisions	
c)	Formulate social media metrics for measuring return on investment	
d)	Manage legal, ethical, privacy, and security issues related to the use of data	i i i i i i i i i i i i i i i i i i i
e)	Identify and discuss emerging trends in research and the use of data analytics and business intelligence	

2.4 Subject Content and Structure

Below are details of the subject content and how it is structured, including specific topics covered in lectures and tutorials. Reading refers to the text unless otherwise indicated.

Weekly Planner:

Week (beginning)	Topic covered in each week's lecture	Reading(s)	Expected work as listed in Moodle	
1 05 Jul	Creating value with social media analytics	Chapter 1	Case #1 Graded as part of portfolio	
2 12 Jul	Understanding social media and social media analytics	Chapters 2, 3	Case #2 Graded as part of portfolio	
3 19 Jul	Analytics-business alignment	Chapter 4	Case #3 Graded as part of portfolio.	
4 26 Jul	Network analytics	Chapter 5	Network analysis using NodeXL Graded as part of portfolio.	
5 02 Aug	Social text analytics	Chapter 6	Text mining and analytics tutorial Graded as part of portfolio	
6 09 Aug	Mid trimester exam			
7 16 Aug	Actions analytics. Hyperlink analytics	Chapters 7, 10	Business intelligence from Facebook Insights. Hyperlink analysis using VOSON Graded as part of portfolio	

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8 23 Aug	Search engine and website analytics	Chapter 8	Google Trends, Google Analytics, Google Experiments tutorial. Graded as part of portfolio Assessment 3 due	
9 30 Aug	Social media location analytics	Chapter 9	Gathering, visualising and sharing data tables using Fusion tables. Hashtag analysis using Trendsmap Graded as part of portfolio	
10 06 Sep	Mobile analytics	Chapter 11	Apps analytics with count.ly Graded as part of portfolio Final case study due	
11 13 Sep	Multimedia analytics	Chapter 12	Video and audio analytics Graded as part of portfolio Assessment 3 due	
12 20 Sep	Managing legal, ethical, privacy and security issues. The future of analytics	Chapter 14	Case #4: In-class debate Formative not graded	
13 26 Sep	Study Review Week			
14 05 Oct	Final Exam Week	Please see Exam Timetable for exam date, time and location		
15 12 Oct				
16 18 OctResults Released 26 October 2021 Certification of Grades 29 October 2021				
T321 begins 01 November 2021				
1Week 1 of classes for T3211Friday 29 October 2021 – Review of Grade Day for T221 – see Sections 2.6 and 3.201 Novbelow for more information.				

2.7 Teaching Methods/Strategies

Briefly described below are the teaching methods/strategies used in this subject:

- *Lectures* (1 hours/week) are conducted in seminar style and address the subject content, provide motivation and context and draw on the students' experience and preparatory reading.
- Tutorials (2 hours/week) include class discussion of case studies and research papers, practice sets and problem-solving and syndicate work on group projects. Tutorials often include group exercises and so contribute to the development of teamwork skills and cultural understanding. Tutorial participation is an essential component of the subject and contributes to the development of many of the graduate attributes (see section 2.2 above). Tutorial participation contributes towards the assessment in many subjects (see details in Section 3.1 for this subject). Supplementary tutorial material such as case studies, recommended readings, review questions etc. will be made available each week in Moodle.
- Online teaching resources include class materials, readings, model answers to assignments and exercises and discussion boards. All online materials for this subject as provided by KOI will be found in the Moodle page for this subject. Students should access Moodle regularly as material may be updated at any time during the trimester
- Other contact academic staff may also contact students either via Moodle messaging, or via email to the email address provided to KOI on enrolment.



2.8 Student Assessment

Assessment is designed to encourage effective student learning and enable students to develop and demonstrate the skills and knowledge identified in the subject learning outcomes. Assessment tasks during the first half of the study period are usually intended to maximise the developmental function of assessment (formative assessment). These assessment tasks include weekly tutorial exercises (as indicated in the weekly planner) and low stakes graded assessments (as shown in the graded assessment table). The major assessment tasks where students demonstrate their knowledge and skills (summative assessment) generally occur later in the study period. These are the major graded assessment items shown in the graded assessment table.

Final grades are awarded by the Board of Examiners in accordance with KOI's Assessment and Assessment Appeals Policy. The definitions and guidelines for the awarding of final grades are:

- *HD High distinction* (85-100%): an outstanding level of achievement in relation to the assessment process.
- o D Distinction (75-84%): a high level of achievement in relation to the assessment process.
- o C Credit (65-74%): a better than satisfactory level of achievement in relation to the assessment process.
- o P Pass (50-64%): a satisfactory level of achievement in relation to the assessment process.
- *F Fail* (0-49%): an unsatisfactory level of achievement in relation to the assessment process.
- *FW:* This grade will be assigned when a student did not submit any of the compulsory assessment items.

Assessment Type	When Assessed	Weighting	Learning Outcomes Assessed
Assessment 1: Mid trimester exam	Week 6	10%	a, b
Assessment 2: Tutorial portfolio	Each week	10%	a, b, c, d
Assessment 3: Analytics case study (2000 word report)	Week 8 (Draft) Week 11 (Final Report)	30%	a, b, c, d
Assessment 4: Final examination On-campus: 2 hours + 10 mins reading time Online: 2 hours + 30 mins technology allowance	Final exam period	50%	a, b, c, d, e

Provided below is a schedule of formal assessment tasks and major examinations for the subject.

Requirements to Pass the Subject:

To gain a pass or better in this subject, students must gain a *minimum of 50%* of the total available subject marks.

2.9 Prescribed Readings:

Khan, G., 2018, Creating Value with Social Media Analytics: Mining Business Insights from Social Media Text, Actions, Networks, Hyperlinks, Apps, Search Engine, and Location Data, CreateSpace Publishing