COURSE SPECIFICATION DOCUMENT

Academic School / Department: School of Liberal Arts

Programme: American Studies
                                        Art History and Visual Culture
                                        Communications: Advertising & PR
                                        Communications: Media Studies
                                        Digital Communication & Social Media
                                        Film Studies
                                        Film and Photography
                                        International History

FHEQ **Level:**   4

Course Title: Data Analysis for Social Change

Course Code: DGT 4120

Student Engagement Hours: 120

Lectures: 22.5
Seminar / Tutorials: 22.5
Independent / Guided Learning: 75

Credits: 12 UK CATS credits
                                        6 ECTS credits
                                        3 US credits

Course Description:
How do users engage with digital and social media content, and how can these reactions and behaviours be measured? This course introduces students to the primary tools for analysing and exploring user experience, the mathematical processes underpinning this analysis, and encourage wide-ranging debates about the ethical and social implications of data analysis.

Prerequisites: None

Aims and Objectives:
This course introduces students to the techniques, tools and debates around the matter of social media analytics. It outlines the role of the data analyst, skills students for both using and evaluating the plethora of available tools, and outlines the key theories related to the ethical application of such technologies.

Programme Outcomes:

American Studies: C4i, C4iii, D4i, D4iii

Art History and Visual Culture: A4i, B4i, C4i, C4ii, D4i-iii
Communications: Advertising and PR: A4ii, B4iii, C4ii, C4iii, D4ii, D4iii
Communications: Media Studies: A4ii, B4iii, C4ii, C4iii, D4ii, D4iii
Digital Communications and Social Media: A4ii, B4ii, C4ii, D4iii
Film Studies: A4iii, B4iii, C4i, C4ii, D4i
Film and Photography: B4i, C4ii, D4ii
International History: C4i, C4iii, D4i, D4iii

A detailed list of the programme outcomes is found in the Programme Specification. This is maintained by Registry and located at: https://www.richmond.ac.uk/programme-and-course-specifications/

Learning Outcomes:
By the end of this course, successful students should be able to:

1. Demonstrate a broad understanding of key concepts, issues, ethics and authors in the area of data analysis, particularly as it relates to identities, relationships, social practices and institutions.

2. Demonstrate the ability to use relevant tools and frameworks for the analysis of datasets, including foundational understanding of probability and statistics

3. Process collected data using appropriate methods (correlation, regression etc.) and derive insights

4. Demonstrate fluency in the application of this data and how it can refine content generated in future

Indicative Content:
- Theories and approaches to data collection
- Understanding metrics
- Spreadsheets and databases
- Concepts of Probability and Statistics
- Visualising data
- Common probability distributions
- Network analysis (edge/node)
- An introduction to scraping and code
- The Digital Self and mediated identity
- Politics and Ethics of Social Media: surveillance, privacy, big data analysis
- The Analytic cycle
- The application of social media tools

Assessment:
This course conforms to the University Assessment Norms approved at Academic Board and located at: https://www.richmond.ac.uk/university-policies/

Teaching Methodology:
This course will use interactive lectures, workshops, and group work in the class and online.

Indicative Text(s):
EMC Education Services. *Data Science and Big Data Analytics: Discovering, Analyzing, Visualizing and Presenting Data*. New York: John Wiley & Sons

Eremenko, K. 2018 *Confident Data Skills: Master the Fundamentals of Working with Data.* London: Kogan Page

Eubanks, V. 2018. Automating Inequality. New York: St. Martin's Press.

Gitelman, Lisa. 2006. *Always Already New Media, History, and the Data of Culture.* Cambridge: MIT.

Grant, Ian Hamilton, Jon Dovey, Kieran Kelly, Martin Lister, and Seth Giddings. 2008. *New Media: A Critical Introduction* 2nd ed. London: Routledge.

Linoff, G. 2015. *Data Analysis Using SQL and Excel*. New York: John Wiley & Sons

Mayer-Schonberger, V. *Big Data.* London: John Murray.

Miller, Vincent. 2011. *Understanding Digital Culture*. London: Sage.

Nussbaumer Knaflic, C. 2015. *Storytelling with Data: A Data Visualization Guide for Business Professionals*. New York: John Wiley & Sons

Russell, M. and Klassen M. 2019 *Mining the Social Web*. O'Reilly.

Spiegelhalter, D. 2019. The Art of Statistics: Learning from Data. London: Pelican Books

See syllabus for complete reading list

Change Log for this CSD:

Nature of Change	Date Approved & Approval Body (School or AB)	Change Actioned by Registry Services
Updated according to UG Programme Review	29.10.21 - AB	
Revision – annual update	May 2023	