



Department of English

COURSES OFFERED BY DEPARTMENT OF ENGLISH

SEMESTER -VIII

[UG Programme for Bachelor in Journalism (Honours) degree]

DISCIPLINE SPECIFIC CORE COURSE-20 (DSC-20) : Data Journalism

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSC-20: Data Journalism	4	3	0	1	Passed Class XIIth with English	NIL

Learning Objectives

The Learning Objectives of this course are as follows:

- To understand the emergence of data journalism in a changing news room
- To study existing data-driven stories to understand their process and impact
- To learn the techniques and skills for producing data stories

Learning Outcomes

The Learning Outcomes of this course are as follows:

- It will equip students to use data to produce stories about sustainable development initiatives.
- The course will enable the students to find a data driven story from available digital information. Students will learn to process it, and make a judicious use of the essential tool kit to tell an effective data driven story in their work as data journalists.

Syllabus of DSC-20

Unit I: Data Journalism – An Overview (15 hours)

- Data Journalism: History, Importance and Scope
- Key sources of data – websites, social media, blogs, open data portals, government data portals (Ministry of Statistics and Program Implementation, Niti Aayog), international bodies- World Bank, UNO and other online platforms
- Elements of effective visual storytelling – clarity, design, impact

Essential Readings:

- 1) *The Data Journalism Handbook*, O'Reilly Press, 2012 – Chapters 1 & 2, pp. 1–28
- 2) *Between Objectivity and Openness: The Mediality of Data for Journalism*, Cogitatio Press, 2014 – Lesage, F., & Hackett, R.A., pp. 2–14
- 3) *Journalism Next: A Practical Guide to Digital Reporting and Publishing*, CQ Press, 2013 – Briggs, M., Chapter 6: Visual Storytelling with Data, pp. 135–150
- 4) *The Data Journalism Handbook*, Gray Jonathan, Bounegru, Liliana, Chambers, Lucy, (Eds.), Chapter 1: Introduction, (Page 1-21)

Unit II: Techniques and Skills (15 hours)

- Data Collection and preparation of Data Sheets
- Arrangement and Presentation – charts & graphs, diagrams & Flowcharts, tables & statistics, maps, plot lines, sketches/ illustrations, , infographics, timelines
- Advanced Visualization techniques – Scroll- based, animated Graphs, bubble plots, heat maps, Choropleth Maps and other interactive visuals
- Contemporary data Driven Stories by national and international media houses

Essential Readings:

- 1) *The Data Journalism Handbook*, O'Reilly Press, 2012 – Chapter 3: Visualizing Data. (Page 35–56)
- 2) *The Data Journalism Handbook*, Gray Jonathan, Bounegru, Liliana, Chambers, Lucy, (Eds.) Chapter 5: Understanding the Data , (Page 147-176)
- 3) *The Data Journalism Handbook*, Gray Jonathan, Bounegru, Liliana, Chambers, Lucy, (Eds.) Chapter 6: Delivering Data , (Page 177-218)
- 4) *Challenge and Change: Reassessing Journalism's Global Future*, Henninger, Maureen, UTS e Press, 2013, Chapter 7: Data-driven journalism (Page 158-184)).

Unit III: Role of Data Journalism (15 hours)

- Role of Data Journalism in Accountability and Transparency
- Data Journalism in Public Health and Climate Reporting
- Influence on Policy and Public Discourse, Sustainable Development Initiatives
- Case studies: Wikileaks, NSA Files, etc.

Essential Readings:

- 1) *Precision Journalism: A Reporter's Introduction to Social Science Methods*, Rowman & Littlefield Publishers, 2002 – Meyer, Philip., Chapters 2 & 3. (Page 20–65)
- 2) *The Data Journalism Handbook*, Eds. Gray Jonathan, Bounegru, Liliana, Chambers, Lucy, Chapter 3: Case Studies, (Page 61-106)
- 3) *The Truthful Art: Data, Charts, and Maps for Communication*, Alberto Cairo, *New Riders*, 2016, Chapter : Mapping Data (Page 263-296)

Unit IV: Future perspective and Field Work (15 Hours)

- Role of AI, automation, and algorithms
- Fact-checking with digital tools and emerging tech platforms
- Ethical concerns – privacy, bias, transparency, data misuse
- Students will create data-driven stories by applying advanced visualization techniques, enabling them to present complex data in a compelling and accessible manner for diverse audiences.

Essential Readings:

- 1) *Ethics for Digital Journalists: Emerging Best Practices*, Routledge, 2015 – Craig, D. & Zion, L., Chapters 4 & 5. (Page 67–95)
- 2) *Journalism, Fake News & Disinformation: A Handbook for Journalism Education and Training*, UNESCO, 2018 – Chapter 6: Fact-Checking in the Digital Age. (Page 85–104)
- 3) *Journalism in the Data Age*, Tong, Jingrong. Chapter: Data Journalism, Vol. 0. 55 City Road: SAGE Publications Ltd, 2022

Suggested Readings:

- Susman-Pena, T. *Understanding Data: Can News Media Rise to the Challenge?* The Center for International Media Assistance, 2014.
- Wong, D, *The Wall Street Journal guide to Information Graphics- The Do's and Don'ts of Presenting Data, Facts and Figures*, New York: W.W. Norton & Company, 2014
- Aitamurto, Tanja, Esa Sirkkunen, and Pauliina Lehtonen. "Trends in data journalism." Espoo: VTT (2011): 0-27.
- Mair, John, and Richard Lance Keeble. *Data Journalism*. Harry N. Abrams, Inc., 2014.
- Lewis, Norman P., Mindy McAdams, and Florian Stalph. "Data journalism." *Journalism & Mass Communication Educator* 75.1 (2020): 16-21.
- *The Data Journalism Handbook: Towards a Critical Data Practice*. Gray Jonathan, Bounegru, Liliana, Chambers, Lucy, (Eds.) Amsterdam University Press, 2021, Chapter 1: "Introduction: Data Journalism in Context", (Page 15–24)
- *Fundamentals of Data Visualization*, Claus O. Wilke, O'Reilly Media, 2019, Chapter: "Principles of Visual Perception", (Page 13–30)
- *The Data Journalism Handbook: Towards a Critical Data Practice*, Gray Jonathan, Bounegru, Liliana, Chambers, Lucy, (Eds.) Amsterdam University Press, 2021, Chapter: Experiencing Data, (Page 157–211)