

Syllabus for *Humanities: Tools and Methodologies*
DAH Second Semester Core Course, February to April 2012

Aims and Learning Outcomes:

This module is compulsory for DAH students (humanities stream only) in the first year of their doctoral programme (second semester) and will provide students with an introduction to new tools and methodologies in digital humanities. It will introduce students to established and emerging methodologies in Information Communications Technologies and to their opportunities and potential for humanities research. The module will provide a bridging framework between the first year introductory courses and subsequent skills-based and subject-based elective modules.

By the end of the course, students will

- Be familiar with a range of established methodologies and tools in ICT, with specific reference to their potential for humanities research.
- Be familiar with a range of established and emerging tools for applying these methodologies to Humanities data.
- Have a basic working knowledge of selected tools and their potential applications.
- Be able to choose those electives (skills-based and subject-based) that will best support their individual research projects.
- Begin to formulate their individual research projects, including the methodological approach to be applied and the tools/skills required to deliver it, in the context of the relationship between humanities and new technologies.

Assessment

- 1) Continuous assessment: following the workshop (8-9 February), students will be asked to complete a formative assessment of 1,500 words. For each of the four sessions, students will be asked to describe and evaluate the implications of the technology or methodology in relation to the problem to which it was applied. These essays will be posted to the forum for group discussions (and will not be graded). Due date: 25 February; to be sent to DAH administrative office (TCD).
- 2) Final essay: Students are required to complete a 6,000 word essay, analysing the potential of new technologies for her/his doctoral research project. Assessment and feedback of essay by student supervisor(s) and graded on pass/fail basis. Grades to be collated by Institutional P.I.s. Due date: 25 May.

Course Programme

I. Opening Workshop (8-9 February; hosted by NUI Maynooth)

II. Seminars (6)

Tuesday Feb 14 (10-12) - distance
Tuesday Feb 21 (10-12) - distance
Tuesday March 6 (10-12) - distance
Tuesday March 13 (10-12) - distance
Tuesday March 27 (10-12) - distance
Tuesday April 3 (10-12) - distance

* Note: the programme of topics for Part II will be distributed at the DAH workshop

Workshop Schedule

Wednesday 8th February

- A) Morning Session, 10 am – 12.30 pm (NUI Maynooth): User Studies and User Needs
- B) Afternoon Session, 2pm – 4.30 pm (UCC): Data Structuring and Enhancement

4.30 pm Reception including Video-Conference Presentation by University of Ulster (on CAIN project – Conflict Archive on the Internet)

Thursday 9th February

- A) Morning Session, 10 am – 12.30 pm (RIA): Project Management and Collaborative Strategies
- B) Afternoon Session, 2pm – 4.30 pm (NUIG): Narrative Technology in Digital Humanities Education

Session 1: Dr John Keating and Aja Teehan (NUI Maynooth)

User Studies and User Needs

This seminar will focus on the place of User analysis in the design and implementation of Digital Humanities projects. Use Case Analysis (a software engineering tool and methodology) and the related concepts of Primary and Secondary Use Cases will be introduced and discussed. The Unified Modeling Language (UML) will be introduced and its application to modeling logical, physical and digital classes of documents, as Primary Use Cases will be examined. Learning Outcomes: Upon successful completion of this seminar, learners will be able to (a) describe the needs of Users in relation to a digital humanities public resource; (b) evaluate a basic Use Case Analysis for a digital humanities public resource; (c) evaluate how well digital humanities resources cater for the needs of their users.

Session 2: Dr Mike Cosgrave (UCC)

Databases: Your Phone bill comes from a database

We don't yet live in The Matrix, but databases, collections of structured, encoded data, touch every part of our daily lives. Humanities data is often loosely formed and unstructured, and bridging the gap between data and database is a challenge. In this session we will look at the sea of data we swim in on a daily basis, examine the basic approaches to how that data is structured. We will draw some simple Entity Relationship diagrams, look some SQL and see how relational databases work. Time permitting, we will review the development of data gathering from Hollerith and the 1890 Census to the Holocaust and beyond.

Followup Readings:

Price, Kenneth M., "Edition, Project, Database, Archive, Thematic Research Collection: What's in a Name?" *Digital Humanities Quarterly*, Summer 2009 Volume 3 Number 3

Dillon, L. Y., "International partners, local volunteers and lots of data: the 1881 Canadian census project.", *History and Computing* 2000, VOL 12; PART 2, pages 163-176

Deconinck-Brossard, F., "Historical research and relational databases: a case study of the Durham 1774 Visitation Returns.", *History and Computing* 2000, VOL 12; PART 2, pages 215-226

Session 3: Shaun Day (RIA)

Digital Project Management and Collaborative Strategies: What is the place of the Scholar in Social Scholarship?

This portion of the symposium will expand on the basics of digital project management by considering the roles of socially enabled tools and process to conduct, share and develop your research. The digital shift is changing the pace and the ways in which we interact and the volume of data that we attempt to mine for information. The objective of this session is to determine how this affects you: how you can take positive control and leverage the shift to work more effectively and efficiently with your supervisor and colleagues and your own research project. This session will build on the participation from the discussion forums during the first semester core module, evaluating their effect and extending this by looking to other case studies to consider how students can gain in this new paradigm. The objective of this stream is to consider how technology and principles impact on your project and to begin to prepare a discussion paper for your sharing with colleagues on this emerging topic.

Session 4: Dr Tony Hall (Lecturer in Educational Technology, School of Education NUIG)

Narrative Technology in Digital Humanities Education

This session will examine the potential of 'narrative technology' to enhance digital humanities education. The synergy of easy-to-use, high-potential technology, and archetypal, well-known storytelling devices and processes, is creating scope for enhanced creativity and collaboration using computing. In addition to outlining contemporary debates and issues in the educational sciences and the design of educational innovations, a number of technologies will be used to illustrate possibilities. These will include animation; digital storytelling; and app development for mobile and ultra-portable devices. The talk will look at the potential role of narrative technologies as tools for pedagogy, reflection and research in digital humanities education.

Schedule for Part II

1. Tuesday Feb 14 (10-12) - Dr Mike Cosgrave (Dept of History, UCC)
Data Analysis: "...1 Historian and 4 programmers.."
2. Tuesday Feb 21 (10-12) - Dr. Rebecca Wall Forrestal (Dept. of History, TCD)
Introduction to GIS
3. Tuesday March 6 (10-12) – Dr Kate Laity (Fulbright Visiting Fellow, Moore Institute, NUIG)
Social Media and Open Scholarship
4. Tuesday March 13 (10-12) – Dr John Keating and Aja Teehan (An Foras Feasa, NUI Maynooth)
Repository Design and Development
5. Tuesday March 27 (10-12) – Professor Susan Schreibman (Long Room Hub, TCD)
Modelling and Knowledge Representation
6. Tuesday April 3 (10-12) – convenor Professor Margaret Kelleher (An Foras Feasa, NUI Maynooth)
Concluding Session

Readings for 14 February:

Data Analysis: "...1 Historian and 4 programmers.." (Manfred Thaller on Computational Linguistics)

Humanists use text a lot; and from Fr Busa and the Index Thomisticus, through flirtations with Computational Linguistics to today's word games like *Ivanhoe*, capturing, processing, analysing and using text is a major activity. In this section we will look briefly at the evolution of this, survey the range of concepts that now go with texts and analysis - text analysis, corpora analysis, structural, semantic, and discourse and narrative content analysis, and more. We will play with some of the current generation of tools like the *Voyeur* tools and look at coding and analysis tools like *Nvivo* which can deal with audio and visual material as well as text. Our aim is to survey the terrain and explore the possibilities of how these techniques can be applied to our own work.

Readings:

Rockwell, Geoffrey "What is Text Analysis anyway" *Literary & Linguistic Computing*, Vol 18, No 2 (2003) pp209-219 is the basic pre-reading for this topic.

Yu, Bei "An Evaluation of text classification methods for literary study" *Literary & Linguistic Computing*, Vol 23, No 3 (2008) p327-342 is significantly more complex, and indicative of sort of work at the statistically heavy end of the area – you should look at it briefly as an example.