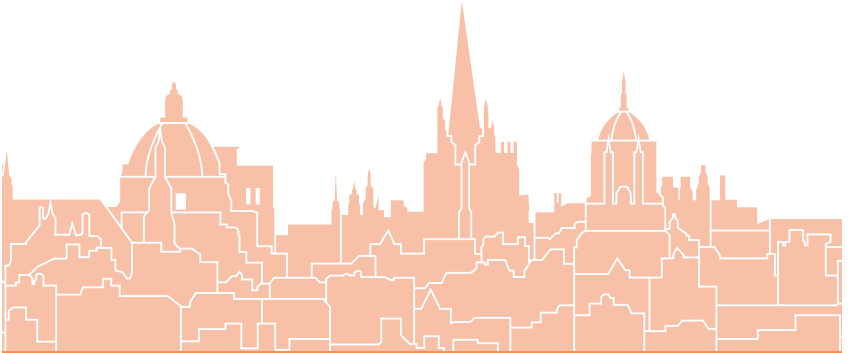THE UNIVERSITY OF OXFORD

DIGITAL HUMANITIES
AT OXFORD SUMMER SCHOOL

APPLIED DATA ANALYSIS

Convenors: Giovanni Colavizza, Matteo Romanello
www.dhoxss.net 🐦@dhoxss I #ADA #DHOxSS2019

We are indebted to our sponsors without whom the Digital Humanities at Oxford Summer School would not be possible.

Oxford e-Research Centre

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ENGINEERING
SCIENCE

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THE SWEDISH FOUNDATION FOR
HUMANITIES AND SOCIAL SCIENCES

www.dhoxss.net

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We're excited to be bringing together over 250 people with the latest digital practice and critical thinking in humanities research. Alongside six workshop strands that have formed the core of the Summer School over the past few years, we are delighted to offer three new ones this year: When Archives Become Digital, Humanities Data: Case Studies and Approaches, and Applied Data Analysis.

The origins of our Summer School go back to the 1990s and the training offered in the Guidelines of the Text Encoding Initiative. Digital research in the Humanities at Oxford, as all over the world, has broadened since then, and through our digital projects and collaborations, encompasses the ever-increasing range of technologies, ideas and collections – analogue and digital – that humanities research embraces.

DHOxSS is the highlight of the digital humanities year at Oxford, enabled by the generosity of our sponsors and our colleagues from around the University, including academic departments, libraries and museums, and our many collaborators. We look forward to sharing the Summer School with you all – participants and speakers from around the world, from many disciplinary and professional backgrounds, and at all career stages.

Professor David De Roure
DHOxSS Director and Executive Chair

DHOxSS 2019 TIMETABLE

For locations see Keble College plan on back cover

	Monday 22 July	Tuesday 23 July	Wednesday 24 July	Thursday 25 July
	Registration 08:00-09:00	Workshops 09:00-10:30		
	Opening Keynote 09:00-10:00			
	Refreshment break 10:00-10:30	Refreshment break 10:30-11:00		
	Workshops 10:30-12:00	Workshops 11:00-13:00		
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	Workshops 16:00-17:00	Additional lectures 16:00-17:00		Cl
	Close 17:00			
	Welcome Drinks and Poster Session 19:00-20:30	Walking tour of Oxford 18:30-19:30	Free time	TORCH lecture 18:00-19:30

Friday
26 July

Closing Keynote
16:00-17:00

Informal
pub trip
17:30

Additional Lectures

Tuesday 23 July 16:00-17:00
How to write a Constitution: Exploring the Records of Multi-party Negotiations
Douglas Price Room

Examining the software platform used in the Quill Project, an interdisciplinary project that brings together historians and lawyers with visualization and AI specialists.
Nicholas Cole, Pembroke College

The Imagination of Ada Lovelace and an Experimental Humanities
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Tracing some paths the ideas of Ada Lovelace and her imagination of Charles Babbage's Analytical Engine might have taken, focussing on music and creativity. We follow Lovelace's idea that "the engine might compose elaborate and scientific pieces of music of any degree of complexity or extent".
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Wikidata, a knowledge base describing around 50 million things, links to thousands of sources. Here we demonstrate some tips and short-cuts in querying Wikidata or linking it to your own research. (No knowledge of RDF or SPARQL is assumed.)
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Digital Humanities Curriculum Panel and Discussion
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What are the key topics in DH research training? A chance to have your say.
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Art and Neuroscience: change blindness, can you spot the difference?
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Describing an experiment at the Ashmolean Museum in Oxford that compares the perception of real-world and on-screen artefacts.
Chrystalina Antoniades, Nuffield Department of Clinical Neurosciences

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How do we sustain data and software in Digital Humanities?
From this year's workshop leaders

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Robert Iliffe, Oxford's Professor of History of Science and General Editor of the Newton Project, a comprehensive edition of all of Newton's printed and unpublished writings.

Full details: www.dhoxss.net/lectures

Workshop Programme
Monday 22 July

09:00-10:00 Opening Keynote	O'Reilly Lecture Theatre

Shall the twain meet? Blending Digital Humanities and Computational Sciences
Focusing on the analysis of historical textual collections and highlighting the challenges and the mutual benefits that arise when humanists work together with computational scientists.
Barbara McGillivray

10:00-10:30 Refreshment break	ARCO Building

10:30-12:00	Seminar Room 2

Workshop Introductions
Opening class: presentation of the strand, objectives and schedule, example of a data analysis application
Giovanni Colavizza, Matteo Romanello

12:00-13:30 Lunch	Dining Hall

13:30-15:30	Seminar Room 2

Data formats and Input/Output (interactive class via notebooks)
Looking at Markup: XML, JSON, CSV; binary, Read/Write, store
Giovanni Colavizza, Matteo Romanello

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00	Seminar Room 2

Options (attendees chose one from the below):
Catching-up classes: assistance is provided to clarify any issue from the previous classes or in setting-up your Python environment. Exercises or mini-projects will be provided. Alternatively, attendees can work on their own mini-project
Giovanni Colavizza, Matteo Romanello

19:00-20:30	Oxford University Museum of Natural History

Welcome drinks and poster session
Open to participants and speakers, this reception includes drinks and nibbles and will feature a poster session.

Workshop Programme
Tuesday 23 July

09:00-10:30	Seminar Room 2

The Python data analysis stack, part I (interactive via notebooks)
Looking at Pandas, Matplotlib, Seaborn.
Giovanni Colavizza, Matteo Romanello

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 2

Tidy data, part I (frontal, 30m)
Introducing basic concepts of (proper/tidy) data modelling, typologies of databases (SQL, noSQL, graph).
Tidy data, part II (frontal/interactive, 1h)
Manipulating data with Pandas.
Giovanni Colavizza, Matteo Romanello

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 2

Options (attendees chose one from the below)
Catching-up classes: assistance is provided to clarify any issue from the previous classes or in setting-up your Python environment. Exercises or mini-projects will be provided. Alternatively, attendees can work on their own mini-project.Lectures at Text to Tech: attend the invited lectures given as part of the Text to Tech strand.
Giovanni Colavizza, Matteo Romanello

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Additional Lecture

Optional event. Pick up a ticket for the lecture of your choice from the Registration Desk (first come, first served). For details of lectures and rooms see the Timetable page.

18:30-19:30 approx.	Central Oxford

Walking tour of Oxford (if pre-booked)
Meet at the Martyr's Memorial at 18.15

Workshop Programme
Wednesday 24 July

09:00-10:30	Seminar Room 2

Tidy data, part III (interactive)
From messy data to tidy data, step by step.
Giovanni Colavizza, Matteo Romanello

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 2

The Python data analysis stack, part II (interactive via notebooks)
Working with Pandas, Matplotlib, Seaborn.
Giovanni Colavizza, Matteo Romanello

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 2

Options (attendees chose one from the below)
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(first come, first served). For details of lectures and rooms see the Timetable page.

Workshop Programme
Thursday 25 July

09:00-10:30	Seminar Room 2

Applied Data Analysis, part I: Basics
Looking at descriptive statistics, sampling and uncertainty, relating two variables.
Hypothesis testing (if time allows).
Giovanni Colavizza, Matteo Romanello

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Seminar Room 2

Applied Data Analysis, part II: Visualization
Visualization with the Python stac, Primer on good and bad dataviz practices.
Giovanni Colavizza, Matteo Romanello

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Seminar Room 2

Options (attendees chose one from the below)
Catching-up classes: assistance is provided to clarify any issue from the previous classes
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Robert Iliffe, Oxford's Professor of History of Science and General Editor of the Newton
Project, a comprehensive edition of all of Newton's printed and unpublished writings.

Workshop Programme
Friday 26 July

09:00-10:30	Seminar Room 2

Applied Data Analysis, part III: Advanced topics
Looking at variable selection and preparation, statistical analyses, basic modelling.
Giovanni Colavizza, Matteo Romanello

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 2

Applied Data Analysis, part IV: Advanced application
Analysis of data resulting from text processing e.g. topic modelling or text reuse.
Giovanni Colavizza, Matteo Romanello

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 2

Closing session
Communicating data analysis results, looking at best practices about publishing datasets, licensing issues, reproducibility, data repositories (frontal), final Q&A.
Giovanni Colavizza, Matteo Romanello

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Closing Keynote	O'Reilly Lecture Theatre

The Hitchhiker's Guide to the Future of Digital Humanities
We have only started scratching the surface of what digital methods can mean for humanities research. We can now start imagining new types of research questions that go beyond the sum of their 'digital' and 'humanities' parts-- to fundamentally change the nature of the humanities questions that we can ask.
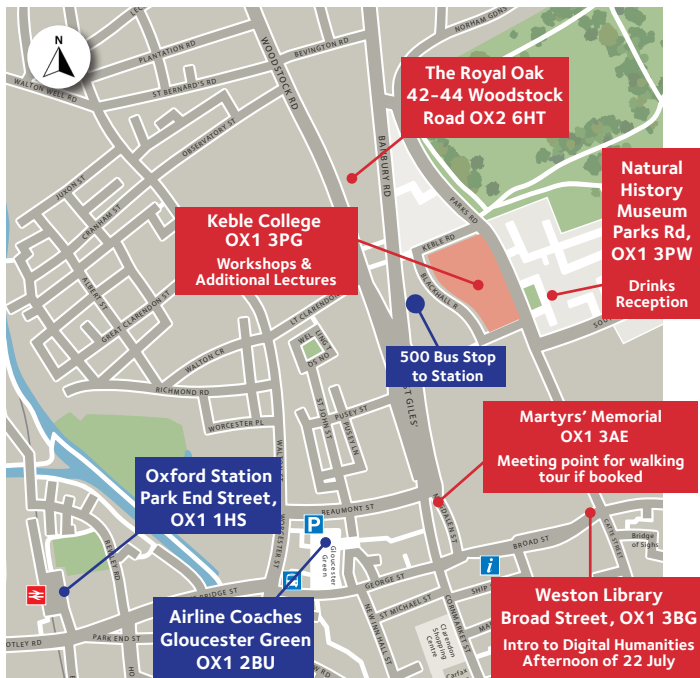*Marieke van Erp*

17:30 Informal pub trip	The Royal Oak

Optional evening event (no booking required).

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The Royal Oak
42-44 Woodstock
Road OX2 6HT

Natural
History
Museum
Parks Rd,
OX1 3PW

Drinks
Reception

Keble College
OX1 3PG

Workshops &
Additional Lectures

500 Bus Stop
to Station

Martyrs' Memorial
OX1 3AE

Meeting point for walking
tour if booked

Oxford Station
Park End Street,
OX1 1HS

Airline Coaches
Gloucester Green
OX1 2BU

Weston Library
Broad Street, OX1 3BG

Intro to Digital Humanities
Afternoon of 22 July

Useful information

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Bus to train station: 500 from Banbury Road, every 15 - 20 mins
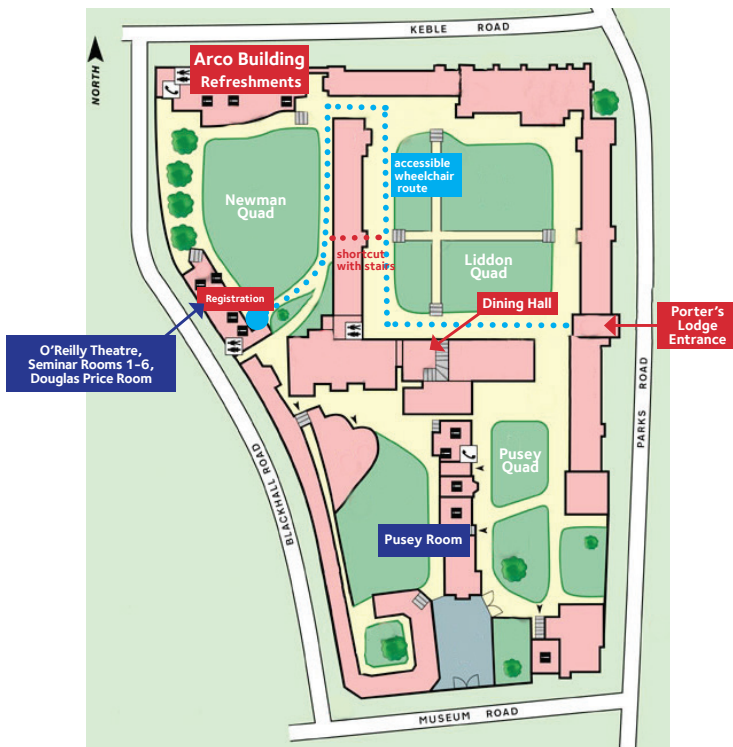
Coaches to Heathrow Airport:
Every 30-60 minutes from Gloucester Green Bus Station.
www.airline.oxfordbus.co.uk

Local interest websites:
www.oxfordcityguide.com
www.experienceoxfordshire.org

Emergency Services: 999

Keble College Plan

Workshop Locations

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From Text to Tech

Pusey Room
Humanities Data: Case Studies and Approaches

O'Reilly Lecture Theatre
An Introduction to Digital Humanities

O'Reilly Seminar Rooms
An Introduction to the Text Encoding Initiative
Applied Data Analysis for the Humanities
When Archives Become Digital
Digital Musicology
Crowdsourced Research in the Humanities
Linked Data for the Humanities

THE UNIVERSITY OF OXFORD

DIGITAL HUMANITIES
AT OXFORD SUMMER SCHOOL

CROWDSOURCED RESEARCH
IN THE HUMANITIES

Convenor: Samantha Blickhan
www.dhoxss.net ✈@dhoxss I #CRiH #DHOxSS2019

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HUMANITIES DIVISION

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DEPARTMENT OF
**ENGINEERING
SCIENCE**

UNIVERSITY OF
OXFORD

The Summer School is organised by the Events Team, Department of Engineering Science, University of Oxford. **www.eng.ox.ac.uk**

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26 July

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Workshop Programme
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Focusing on the analysis of historical textual collections and highlighting the challenges and the mutual benefits that arise when humanists work together with computational scientists.
Barbara McGillivray

10:00-10:30 Refreshment break	ARCO Building

10:30-12:00	Seminar Room 4

Group Introductions and Introductions to Crowdsourcing
Group introductions and an overview of the workshop, followed by a brief presentation examining the history of crowdsourced research in the Humanities, and providing an overview of the field in its current state. Includes time for small group work in which participants review existing crowdsourcing projects.
Samantha Blickhan

12:00-13:30 Lunch	Dining Hall

13:30-15:30	Seminar Room 4

Zooniverse Project Builder
An introduction to the Zooniverse, the world's largest platform for crowdsourced research. Special focus on the Zooniverse Project Builder, the tool for building crowdsourcing projects for free. Participants will use this platform to build their own crowdsourcing projects over the course of the week.
Samantha Blickhan

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00	Seminar Room 4

Work on individual projects
Supervised by Samantha Blickhan & various Zooniverse team members

19:00-20:30	Oxford University Museum of Natural History

Welcome drinks and poster session
Open to participants and speakers, this reception includes drinks and nibbles and will feature a poster session.

Workshop Programme
Tuesday 23 July

09:00-10:30	Seminar Room 4

Crowdsourcing and Social Machines
This session will introduce participants to the theory and practice of social machines, and how they relate to those of crowdsourcing. Participants will look at examples of social machines, and engage in small-group activities such as designing social machines of their own.
David De Roure

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 4

Workflows and development
A practical session in which we'll apply principals from the morning session to individual projects. We'll discuss how to translate research questions into dedicated tasks, and explore some best practices for creating workflows that are digestible, yet which also produce quality data.
Samantha Blickhan

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 4

Work on individual projects
Supervised by Samantha Blickhan & various Zooniverse team members

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Additional Lecture	

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Walking tour of Oxford (if pre-booked)
Meet at the Martyr's Memorial at 18.15

Workshop Programme
Wednesday 24 July

09:00-10:30	Seminar Room 4

Inclusivity and Ethics in Crowdsourcing
This session will introduce some best practices for building projects aimed at a broad audience, specifically how to avoid workflow, question and design choices that result in unintentional barriers to entry for some volunteers. We will also discuss ethics in crowdsourcing and specifically ask: what (if anything) do project owners owe their volunteers? This session will also touch on the importance of openness, including open data, code, and results.
Samantha Blickhan

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Seminar Room 4

Project review and revision
In this interactive session, we'll break into groups to provide review for each other's projects, a small-scale version of Zooniverse beta review, a process that is required for projects to fully launch. After feedback is given, we'll discuss the process of receiving and reviewing feedback and how to implement that feedback into a project.
Samantha Blickhan

13:00-14:30 Lunch	Dining Hall
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Workshop Programme
Thursday 25 July

09:00-10:30	Seminar Room 4

Communicating Results

This session will focus on presenting and publishing data once a project is complete, but will also discuss the process of sharing results while a project is still ongoing. Will also focus on making data useful and accessible for academic and non-academic audiences.

Andrew Cusworth

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Seminar Room 4

Sustainability and Communication

Participants will learn about and discuss best practices for long-term project sustainability. A major component of project sustainability is communication and interaction with volunteers, so the session will include an in-depth introduction to Talk, the Zooniverse message board system.

Samantha Blickhan

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Seminar Room 4

Project Review and Revision

In this session, participants will have hands-on experience with the Zooniverse Talk board. We will practice responding to user questions, both about the Zooniverse platform and the research behind the project.

Samantha Blickhan

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16:00-17:00 Additional Lecture	

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Workshop Programme
Friday 26 July

09:00-10:30	Seminar Room 4

Exporting Project Data
In this session, participants will learn about working with project results, including how to export data from the Project Builder, an overview of the data format, and a few general approaches to working with these data.
Samantha Blickhan

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Seminar Room 4

Presentation of Projects and Group Discussion
Individuals to present final projects to the group, discuss what they've learned, and what they can do differently in future. Will be an opportunity to discuss how they can incorporate crowdsourcing into future work
Samantha Blickhan

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Seminar Room 4

Wrap-Up Session: Questions & Feedback
An opportunity for questions and to share final thoughts about the course.
Samantha Blickhan

15:30-16:00 Refreshment break	ARCO Building
16:00-17:00 Closing Keynote	O'Reilly Lecture Theatre

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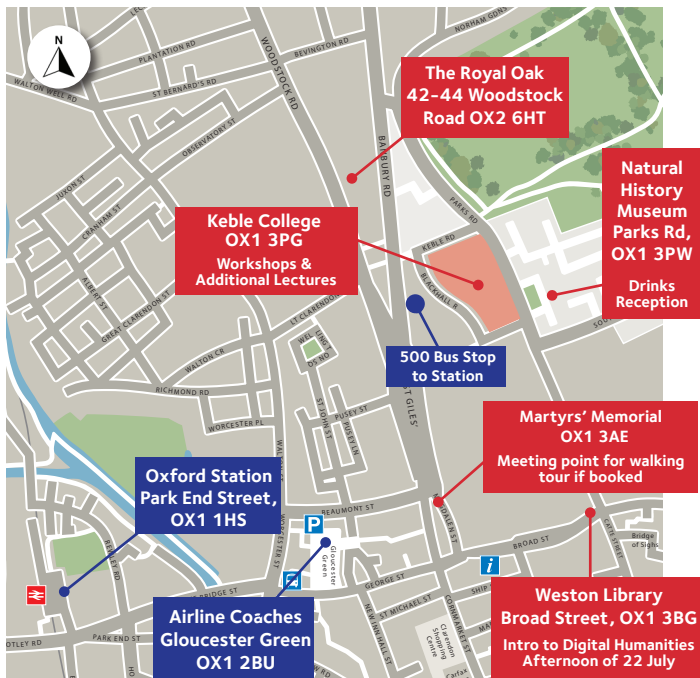*Marieke van Erp*

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The Royal Oak
42-44 Woodstock
Road OX2 6HT

Natural
History
Museum
Parks Rd,
OX1 3PW

Drinks
Reception

Keble College
OX1 3PG

Workshops &
Additional Lectures

500 Bus Stop
to Station

Martyrs' Memorial
OX1 3AE

Meeting point for walking
tour if booked

Oxford Station
Park End Street,
OX1 1HS

Airline Coaches
Gloucester Green
OX1 2BU

Weston Library
Broad Street, OX1 3BG

Intro to Digital Humanities
Afternoon of 22 July

Useful information

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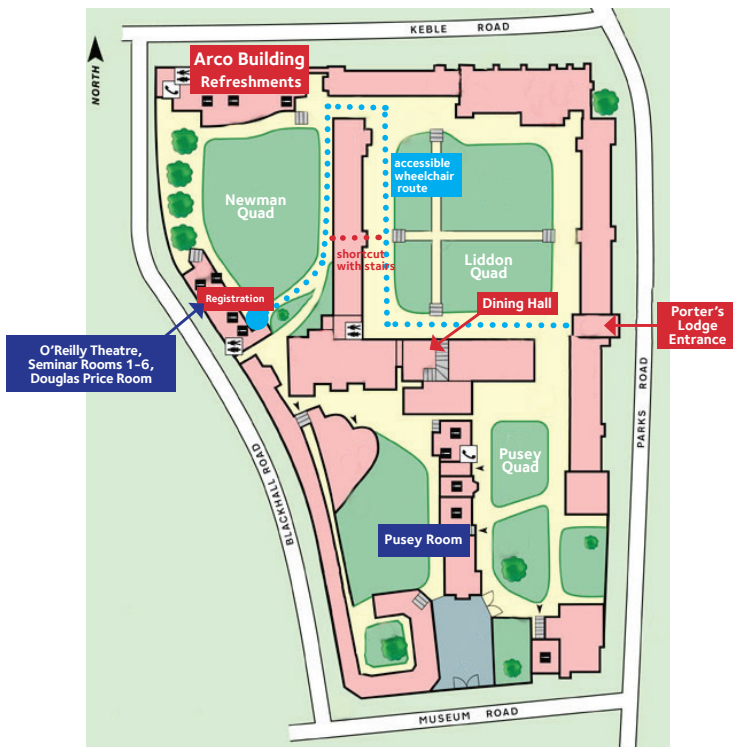
Coaches to Heathrow Airport:
Every 30-60 minutes from Gloucester Green Bus Station.
www.airline.oxfordbus.co.uk

Local interest websites:
www.oxfordcityguide.com
www.experienceoxfordshire.org

Emergency Services: 999

Keble College Plan

The map shows various buildings and areas including: Keble Road, Arco Building (Refreshments), Newman Quad, accessible wheelchair route, shortcut with stairs, Liddon Quad, Dining Hall, Registration, O'Reilly Theatre, Seminar Rooms 1–6, Douglas Price Room, Porter's Lodge Entrance, Blackhall Road, Parks Road, Pusey Quad, Pusey Room, Museum Road, NORTH.

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Douglas Price Room
From Text to Tech

Pusey Room
Humanities Data: Case Studies and Approaches

O'Reilly Lecture Theatre
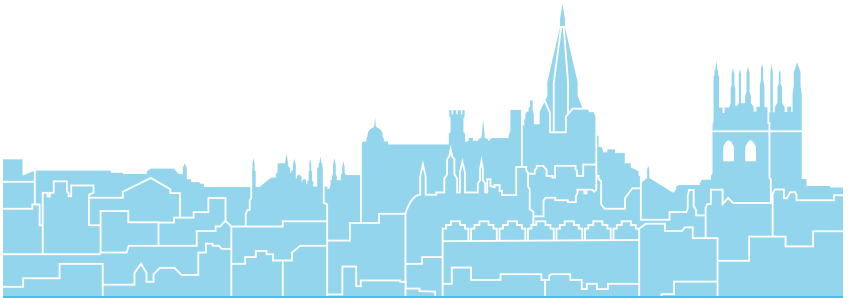An Introduction to Digital Humanities

O'Reilly Seminar Rooms
An Introduction to the Text Encoding Initiative
Applied Data Analysis for the Humanities
When Archives Become Digital
Digital Musicology
Crowdsourced Research in the Humanities
Linked Data for the Humanities

THE UNIVERSITY OF OXFORD

DIGITAL HUMANITIES
AT OXFORD SUMMER SCHOOL

WHEN ARCHIVES BECOME DIGITAL

Convenors: Helle Strandgaard Jensen, Andrew Cusworth, Adéla Sobotkova
www.dhoxss.net @dhoxss I #digitalarchives #DHOxSS2019

We are indebted to our sponsors without whom the Digital Humanities at Oxford Summer School would not be possible.

Oxford e-Research Centre

Bodleian Libraries
UNIVERSITY OF OXFORD

DEPARTMENT OF ENGINEERING SCIENCE

HUMANITIES DIVISION

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The Alan Turing Institute

KING'S College LONDON
King's Digital Lab

FAST

Software Sustainability Institute

RIKSBANKENS JUBILEUMSFOND
THE SWEDISH FOUNDATION FOR HUMANITIES AND SOCIAL SCIENCES

www.dhoxss.net

Welcome to the Digital Humanities at Oxford Summer School 2019

We're excited to be bringing together over 250 people with the latest digital practice and critical thinking in humanities research. Alongside six workshop strands that have formed the core of the Summer School over the past few years, we are delighted to offer three new ones this year: When Archives Become Digital, Humanities Data: Case Studies and Approaches, and Applied Data Analysis.

The origins of our Summer School go back to the 1990s and the training offered in the Guidelines of the Text Encoding Initiative. Digital research in the Humanities at Oxford, as all over the world, has broadened since then, and through our digital projects and collaborations, encompasses the ever-increasing range of technologies, ideas and collections – analogue and digital – that humanities research embraces.

DHOxSS is the highlight of the digital humanities year at Oxford, enabled by the generosity of our sponsors and our colleagues from around the University, including academic departments, libraries and museums, and our many collaborators. We look forward to sharing the Summer School with you all – participants and speakers from around the world, from many disciplinary and professional backgrounds, and at all career stages.

Professor David De Roure
DHOxSS Director and Executive Chair

DEPARTMENT OF
**ENGINEERING
SCIENCE**

UNIVERSITY OF
OXFORD

The Summer School is organised by the Events Team, Department of Engineering Science, University of Oxford. **www.eng.ox.ac.uk**

DHOxSS 2019 TIMETABLE

For locations see Keble College plan on back cover

Monday 22 July	Tuesday 23 July	Wednesday 24 July	Thursday 25 July
Registration 08:00-09:00			
Opening Keynote 09:00-10:00	**Workshops 09:00-10:30**		
Refreshment break 10:00-10:30			
Workshops 10:30-12:00	**Refreshment break 10:30-11:00**		
	Workshops 11:00-13:00		
Lunch 12:00-13:30			
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Close 17:00			
Welcome Drinks and Poster Session 19:00-20:30	**Walking tour of Oxford** 18:30-19:30	**Free time**	**TORCH lecture** 18:00-19:30

Additional Lectures

Tuesday 23 July 16:00-17:00
How to write a Constitution: Exploring the Records of Multi-party Negotiations
Douglas Price Room

Examining the software platform used in the Quill Project, an interdisciplinary project that brings together historians and lawyers with visualization and AI specialists.
Nicholas Cole, Pembroke College

The Imagination of Ada Lovelace and an Experimental Humanities
O'Reilly Lecture Theatre

Tracing some paths the ideas of Ada Lovelace and her imagination of Charles Babbage's Analytical Engine might have taken, focussing on music and creativity. We follow Lovelace's idea that "the engine might compose elaborate and scientific pieces of music of any degree of complexity or extent".
Pip Willcox, National Archives and David De Roure, Oxford e-Research Centre

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Wikidata: knowledge representation the easy way
Douglas Price Room

Wikidata, a knowledge base describing around 50 million things, links to thousands of sources. Here we demonstrate some tips and short-cuts in querying Wikidata or linking it to your own research. (No knowledge of RDF or SPARQL is assumed.)
Martin Poulter, Wikimedian

Digital Humanities Curriculum Panel and Discussion
O'Reilly Lecture Theatre

What are the key topics in DH research training? A chance to have your say.
David De Roure, Oxford e-Research Centre, and other convenors

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Art and Neuroscience: change blindness, can you spot the difference?
Douglas Price Room

Describing an experiment at the Ashmolean Museum in Oxford that compares the perception of real-world and on-screen artefacts.
Chrystalina Antoniades, Nuffield Department of Clinical Neurosciences

Reproducible and Sustainable Research Panel
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How do we sustain data and software in Digital Humanities?
From this year's workshop leaders

Thursday 25 July 18:00-19:30
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Robert Iliffe, Oxford's Professor of History of Science and General Editor of the Newton Project, a comprehensive edition of all of Newton's printed and unpublished writings.

Full details: www.dhoxss.net/lectures

Workshop Programme
Monday 22 July

09:00-10:00 Opening Keynote	O'Reilly Lecture Theatre

Shall the twain meet? Blending Digital Humanities and Computational Sciences
Focusing on the analysis of historical textual collections and highlighting the challenges and the mutual benefits that arise when humanists work together with computational scientists.
Barbara McGillivray

10:00-10:30 Refreshment break	ARCO Building

10:30-12:00	Seminar Room 5

Introduction of conveners and participants, as well as the set-up for the week
Outlining the major changes in the archival landscape and introducing the 'Digital Archival Literacy' framework.
Helle Strandgaard Jensen, Andrew Cusworth, Adela Sobotkova

12:00-13:30 Lunch	Dining Hall

13:30-15:30	Seminar Room 5

Introduction to Data and Language Games: interactive
Hands-on exercises where participants work in groups to build a shared and well-defined basis for our work throughout the week.
Helle Strandgaard Jensen, Andrew Cusworth, Adela Sobotkova

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00	Seminar Room 5

Web-scraping with browser extensions: hands-on session
Introducing Web scraping as a technique for extracting information from websites. Converting non-tabular or poorly structured data into a usable, structured format.
Adela Sobotkova

19:00-20:30	Oxford University Museum of Natural History

Welcome drinks and poster session
Open to participants and speakers, this reception includes drinks and nibbles and will feature a poster session.

Workshop Programme
Tuesday 23 July

09:00-10:30	Seminar Room 5

Data Organisation in Spreadsheets
This session focuses on the pitfalls of 'human' ways of structuring and working with tabular data. In order to use tools that make computers morr efficient, we need to structure our data the way that computers need it.
Adela Sobotkova

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Seminar Room 5

Data Cleaning in Open Refine
Introducing Open Refine, a powerful, free tool for exploring, normalising and cleaning datasets.
Adela Sobotkova

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Seminar Room 5

Perfect Pragmatism: What does best practice mean in practice?
Focusing on situating projects within the spectrum of digital archive practices to establish best possible practice within available means. Addressing thorny matters such as digitisation quality, medadata creation, and the presentation and management of digital archives.
Andrew Cusworth

15:30-16:00 Refreshment break	ARCO Building
16:00-17:00 Additional Lecture	

Optional event. Pick up a ticket for the lecture of your choice from the Registration Desk (first come, first served). For details of lectures and rooms see the Timetable page.

18:30-19:30 approx.	Central Oxford

Walking tour of Oxford (if pre-booked)
Meet at the Martyr's Memorial at 18.15

Workshop Programme
Wednesday 24 July

09:00-10:30	Seminar Room 5

Introduction to R
R is one of the most popular open source tools for data wrangling, analysis and visualization. This session introduces the features of R and is designed for participants with no programming experience.
Adela Sobotkova

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 5

Text mining and visualisation in R (and/or Voyant)
Building on the introduction to R to use the Tidyverse and Tidytext packages as well as Voyant and other open virtual laboratories.
Adela Sobotkova

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 5

Web archives and the challenges of working with born digital material
Introduction to web archives, considering both the potential of this new kind of primary source and the challenges it poses for researchers.
Jane Winters

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Additional Lecture

Optional event. Pick up a ticket for the lecture of your choice from the Registration Desk (first come, first served). For details of lectures and rooms see the Timetable page.

Workshop Programme
Thursday 25 July

09:00-10:30	Seminar Room 5

Cultural capital and the digital environment
Looking critically at the machinic elements of both non-digital and digital archives, posing questions about the processes of digitalisation as democratisation of knowledge.
Andrew Cusworth

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 5

A peak behind the scenes: digital archives in practice
A roundtable where we to hear from practitioners who work on making, improving and assembling digital archives on a day-to-day basis.
Alex Green, Judith Siefring, Samantha Callaghan

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 5

Ethics, archives, and metadata
Introducing questions and challenges related to Indigenous Digital Humanities: the problem of silenced voices and exclusion in relation to digital archives.
Samantha Callaghan

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Additional Lecture

Optional event. Pick up a ticket for the lecture of your choice from the Registration Desk (first come, first served). For details of lectures and rooms see the Timetable page.

18:00-19:30 TORCH Lecture Oxford	O'Reilly Lecture Theatre

Robert Iliffe, Oxford's Professor of History of Science and General Editor of the Newton Project, a comprehensive edition of all of Newton's printed and unpublished writings.

Workshop Programme
Friday 26 July

09:00-10:30	Seminar Room 5

Self-digitization and the ten thousand pictures problem
Introducing Tropy, a free Open Access tool for organising digital photos, through a seminar-style talk and simple hands-on experiences with the tool.
Helle Strandgaard Jensen

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 5

Hello world: from digitization to digital archive
Introducing some of the freely available ways in which we can move from some of the previous practical topics to making a digital archive available online.
Andrew Cusworth

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 5

Once archives have become digital
Round-up and thoughts about where this all leads.
Helle Strandgaard Jensen, Andrew Cusworth, Adela Sobotkova

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Closing Keynote	O'Reilly Lecture Theatre

The Hitchhiker's Guide to the Future of Digital Humanities
We have only started scratching the surface of what digital methods can mean for humanities research. We can now start imagining new types of research questions that go beyond the sum of their 'digital' and 'humanities' parts-- to fundamentally change the nature of the humanities questions that we can ask.
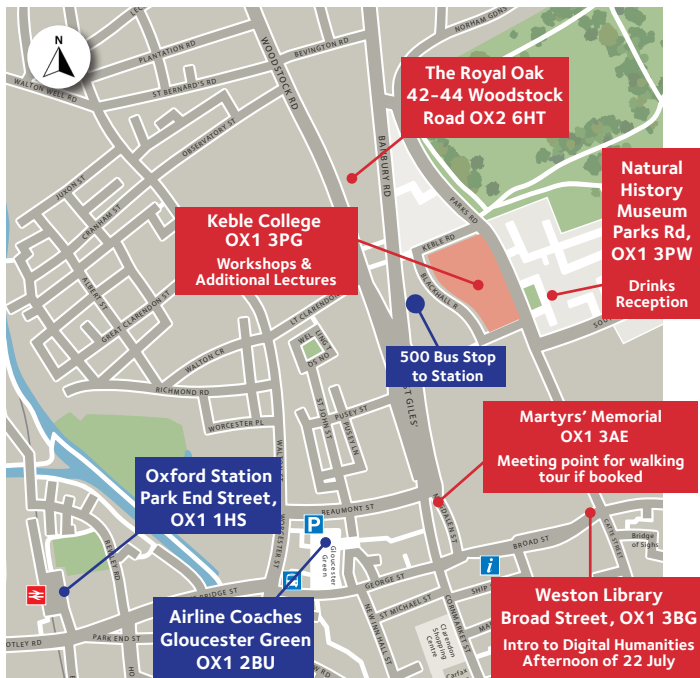*Marieke van Erp*

17:30 Informal pub trip	The Royal Oak

Optional evening event (no booking required).

Practical Help

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The Royal Oak
42-44 Woodstock
Road OX2 6HT

Natural
History
Museum
Parks Rd,
OX1 3PW

Drinks
Reception

Keble College
OX1 3PG

Workshops &
Additional Lectures

500 Bus Stop
to Station

Martyrs' Memorial
OX1 3AE

Meeting point for walking
tour if booked

Oxford Station
Park End Street,
OX1 1HS

Airline Coaches
Gloucester Green
OX1 2BU

Weston Library
Broad Street, OX1 3BG

Intro to Digital Humanities
Afternoon of 22 July

Useful information

Taxi: 001 TAXIS +44 1865 240000

Bus to train station: 500 from Banbury Road, every 15 - 20 mins

Coaches to Heathrow Airport:
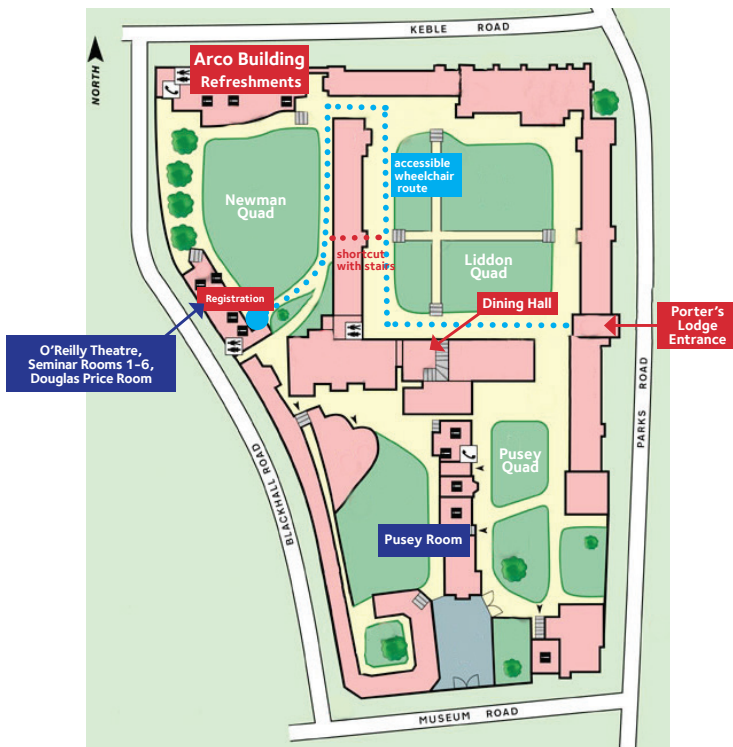Every 30-60 minutes from Gloucester Green Bus Station.
www.airline.oxfordbus.co.uk

Local interest websites:
www.oxfordcityguide.com
www.experienceoxfordshire.org

Emergency Services: 999

Keble College Plan

Workshop Locations

Douglas Price Room
From Text to Tech

Pusey Room
Humanities Data: Case Studies and Approaches

O'Reilly Lecture Theatre
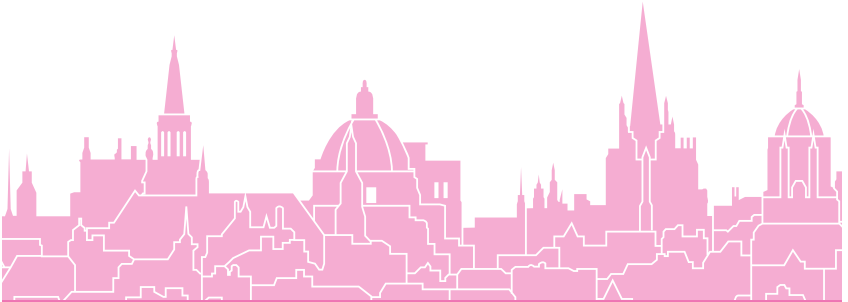An Introduction to Digital Humanities

O'Reilly Seminar Rooms
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Focusing on the analysis of historical textual collections and highlighting the challenges and the mutual benefits that arise when humanists work together with computational scientists.
Barbara McGillivray

10:00-10:30 Refreshment break	ARCO Building

10:30-12:00	O'Reilly Lecture Theatre

Digital Scholarship: Intersection, Scale and Social Machines
Taking a broad look at Digital Humanities, and setting the scene for the week's discussions.
Dave De Roure

12:00-13:30 Lunch	Dining Hall

13:30-15:30	Weston Library

Bodleian Student Editions Workshops
Through working hands-on with early modern letters, participants are introduced to special collections handling, palaeography, transcription and editorial practices, metadata, and digital text at scale. Meet at 13:15 on the Newman Quad green outside the O'Reilly Theatre to be taken to the Weston Library.
Helen Brown, Chris Fletcher, Miranda Lewis, Olivia Thompson, Mike Webb

15:30-16:00 Refreshment break	Weston Library

16:00-17:00	Weston Library

Foundations of Digital Preservation
Good practices for preventing loss and mitigating risks to your digital materials.
John Southall

19:00-20:30	Oxford University Museum of Natural History

Welcome drinks and poster session
Open to participants and speakers, this reception includes drinks and nibbles and will feature a poster session.

Workshop Programme
Tuesday 23 July

09:00-10:30	O'Reilly Lecture Theatre

An Introduction to the International Image Interoperability Framework
An overview of the IIIF with demonstrations of tools for comparing, annotating and remixing digital images.
Emma Stanford

Text Mining
An approach to 'forensic stylometry' identifying the author of a text based on a corpus of documents.
Tom Wood

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	O'Reilly Lecture Theatre

Digital Archive Literacy
Why being able to question the economies, policies and systems design of digital archives will benefit humanities scholars in teaching and research.
Helle Strandgaard Jensen

Text encoding: TEI in a research context
An overview of the Text Encoding Initiative, how it can be used to address a variety of research questions.
Yasmin Faghihi, Huw Jones

13:00-14:30 Lunch	Dining Hall

14:30-15:30	O'Reilly Lecture Theatre

Introduction to Visualization for Digital Humanities
How visualization can be used in Digital Humanities projects.
Alfie Abdul Rahman

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Additional Lecture	

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18:30-19:30 approx.	Central Oxford

Walking tour of Oxford (if pre-booked)
Meet at the Martyr's Memorial at 18.15

Workshop Programme
Wednesday 24 July

09:00-10:30	O'Reilly Lecture Theatre

Reproducible Research in the Humanities
Practical sessions and discussions on writing and using code to support reproducible research.
Iain Emsley

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	O'Reilly Lecture Theatre

An Introduction to computer vision tools for the Digital Humanities: How to search, compare and annotate your images
Introducing open source software tools.
Giles Bergel, Ernesto Coto, Abhishek Duta

13:00-14:30 Lunch	Dining Hall

14:30-15:30	O'Reilly Lecture Theatre

Music Information Retrieval: from SALAMI to AI
We look at many good practices in digital humanities and data science, presented in the Structural Analysis of Large Amounts of Music Information. We also consider current and future directions, including artificial intelligence.
David De Roure

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Additional Lecture

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Workshop Programme
Thursday 25 July

09:00-10:30	O'Reilly Lecture Theatre

The Zooniverse
Introduction to the Zooniverse humanities project.
Samantha Blickhan

Hyperspectral Imaging in the Humanities
How hyperspectral imaging has been applied to item in the Bodleian.
David Howell

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	O'Reilly Lecture Theatre

Linked Data for the Humanities: Introducing the Semantic Web
Introducing the principles and technologies behind Linked Data illustrated through examples from Digital Musicology.
Kevin Page

13:00-14:30 Lunch	Dining Hall

14:30-15:30	O'Reilly Lecture Theatre

Machine Learning and Music
A case study in mood analysis of music audio is used to introduce basic machine learning concepts.
Stephen Downie

15:30-16:00 Refreshment break	ARCO Building

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Workshop Programme
Friday 26 July

09:00-10:30	O'Reilly Lecture Theatre

Challenges in Visualizing the Past
Outlining how visualization can be used to investigate the past.
Jassim Happa

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	O'Reilly Lecture Theatre

An Introduction to Relational Databases
Relational databases, when and why to use them, and how to design one. Hands-on exercises.
Meriel Patrick

13:00-14:30 Lunch	Dining Hall

14:30-15:30	O'Reilly Lecture Theatre

Round up discussion
Questions and thoughts reflecting on the week and the ways ahead for Digital Humanities
Dave De Roure

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Closing Keynote	O'Reilly Lecture Theatre

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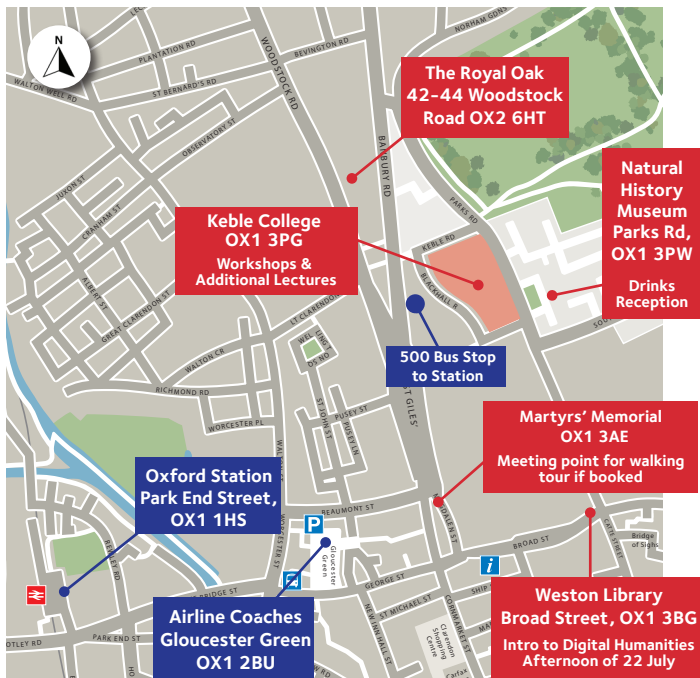*Marieke van Erp*

17:30 Informal pub trip	The Royal Oak

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The Royal Oak
42-44 Woodstock Road OX2 6HT

Natural History Museum Parks Rd, OX1 3PW

Drinks Reception

Keble College OX1 3PG
Workshops & Additional Lectures

500 Bus Stop to Station

Martyrs' Memorial OX1 3AE
Meeting point for walking tour if booked

Oxford Station Park End Street, OX1 1HS

Airline Coaches Gloucester Green OX1 2BU

Weston Library Broad Street, OX1 3BG
Intro to Digital Humanities Afternoon of 22 July

Useful information

Taxi: 001 TAXIS +44 1865 240000

Bus to train station: 500 from Banbury Road, every 15 - 20 mins

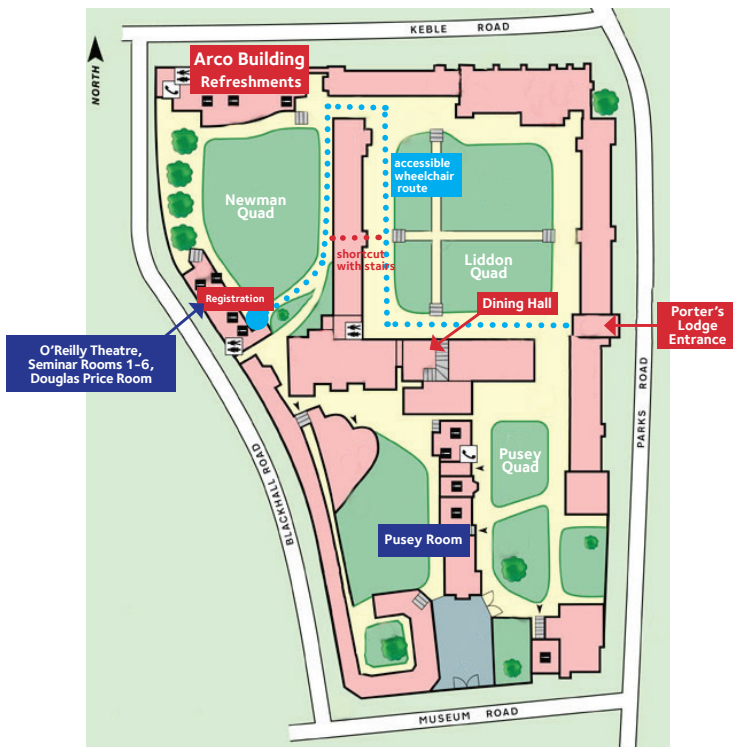**Coaches to Heathrow Airport:**
Every 30-60 minutes from Gloucester Green Bus Station.
www.airline.oxfordbus.co.uk

Local interest websites:
www.oxfordcityguide.com
www.experienceoxfordshire.org

Emergency Services: 999

Keble College Plan

KEBLE ROAD

NORTH

Arco Building
Refreshments

accessible wheelchair route

Newman Quad

Liddon Quad

shortcut with stairs

Registration

Dining Hall

O'Reilly Theatre, Seminar Rooms 1–6, Douglas Price Room

Porter's Lodge Entrance

BLACKHALL ROAD

PARKS ROAD

Pusey Quad

Pusey Room

MUSEUM ROAD

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Douglas Price Room
From Text to Tech

Pusey Room
Humanities Data: Case Studies and Approaches

O'Reilly Lecture Theatre
An Introduction to Digital Humanities

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THE UNIVERSITY OF OXFORD

DIGITAL HUMANITIES
AT OXFORD SUMMER SCHOOL

DIGITAL MUSICOLOGY

Convenor: Kevin Page
www.dhoxss.net @dhoxss I #digitalmusicology #DHOxSS2019

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Oxford e-Research Centre

Bodleian Libraries
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DEPARTMENT OF
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HUMANITIES
DIVISION

OXFORD
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TORCH

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THE OXFORD RESEARCH CENTRE IN THE HUMANITIES

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Software Sustainability Institute

RIKSBANKENS JUBILEUMSFOND
THE SWEDISH FOUNDATION FOR
HUMANITIES AND SOCIAL SCIENCES

www.dhoxss.net

Welcome to the Digital Humanities at Oxford Summer School 2019

We're excited to be bringing together over 250 people with the latest digital practice and critical thinking in humanities research. Alongside six workshop strands that have formed the core of the Summer School over the past few years, we are delighted to offer three new ones this year: When Archives Become Digital, Humanities Data: Case Studies and Approaches, and Applied Data Analysis.

The origins of our Summer School go back to the 1990s and the training offered in the Guidelines of the Text Encoding Initiative. Digital research in the Humanities at Oxford, as all over the world, has broadened since then, and through our digital projects and collaborations, encompasses the ever-increasing range of technologies, ideas and collections – analogue and digital – that humanities research embraces.

DHOxSS is the highlight of the digital humanities year at Oxford, enabled by the generosity of our sponsors and our colleagues from around the University, including academic departments, libraries and museums, and our many collaborators. We look forward to sharing the Summer School with you all – participants and speakers from around the world, from many disciplinary and professional backgrounds, and at all career stages.

Professor David De Roure
DHOxSS Director and Executive Chair

The Summer School is organised by the Events Team, Department of Engineering Science, University of Oxford. **www.eng.ox.ac.uk**

DHOxSS 2019 TIMETABLE

For locations see Keble College plan on back cover

Monday 22 July	Tuesday 23 July	Wednesday 24 July	Thursday 25 July
Registration 08:00-09:00			
Opening Keynote 09:00-10:00	Workshops 09:00-10:30		
Refreshment break 10:00-10:30			
Workshops 10:30-12:00	Refreshment break 10:30-11:00		
	Workshops 11:00-13:00		
Lunch 12:00-13:30			
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	Refreshment break 15:30-16:00		
Workshops 16:00-17:00	Additional lectures 16:00-17:00		Cl
	Close 17:00		
Welcome Drinks and Poster Session 19:00-20:30	Walking tour of Oxford 18:30-19:30	Free time	TORCH lecture 18:00-19:30

Friday
26 July

Closing Keynote
16:00-17:00

Informal
pub trip
17:30

Additional Lectures

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How to write a Constitution: Exploring the Records of Multi-party Negotiations
Douglas Price Room

Examining the software platform used in the Quill Project, an interdisciplinary project that brings together historians and lawyers with visualization and AI specialists.
Nicholas Cole, Pembroke College

The Imagination of Ada Lovelace and an Experimental Humanities
O'Reilly Lecture Theatre

Tracing some paths the ideas of Ada Lovelace and her imagination of Charles Babbage's Analytical Engine might have taken, focussing on music and creativity. We follow Lovelace's idea that "the engine might compose elaborate and scientific pieces of music of any degree of complexity or extent".
Pip Willcox, National Archives and David De Roure, Oxford e-Research Centre

Wednesday 24 July 16:00-17:00
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Wikidata, a knowledge base describing around 50 million things, links to thousands of sources. Here we demonstrate some tips and short-cuts in querying Wikidata or linking it to your own research. (No knowledge of RDF or SPARQL is assumed.)
Martin Poulter, Wikimedian

Digital Humanities Curriculum Panel and Discussion
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What are the key topics in DH research training? A chance to have your say.
David De Roure, Oxford e-Research Centre, and other convenors

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How do we sustain data and software in Digital Humanities?
From this year's workshop leaders

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Robert Iliffe, Oxford's Professor of History of Science and General Editor of the Newton Project, a comprehensive edition of all of Newton's printed and unpublished writings.

Full details: www.dhoxss.net/lectures

Workshop Programme
Monday 22 July

09:00-10:00 Opening Keynote	O'Reilly Lecture Theatre

Shall the twain meet? Blending Digital Humanities and Computational Sciences
Focusing on the analysis of historical textual collections and highlighting the challenges and the mutual benefits that arise when humanists work together with computational scientists.
Barbara McGillivray

10:00-10:30 Refreshment break	ARCO Building

10:30-12:00	Seminar Room 3

Overview of the Digital Musicology
Introducing a wide variety of practical and theoretical digital techniques and illustrate their use within a number of musicology studies.
Kevin Page
Digital Musicology: a personal perspective/ An Introduction to Music Information Retrieval: musicological implications
Two personal distinct but complementary views from leading researchers on how these technological innovations can be brought to bear within musicology.
David Lewis, Stephen Downie

12:00-13:30 Lunch	Dining Hall

13:30-15:30	Seminar Room 3

Hands on: Using computers to analyse recordings. An introduction to signal processing
Introducing the basics of computational treatment of recordings of music, aiding understanding of how features relate to perceptual and musical concepts.
Stephen Downie, Chris Cannam, with: David Lewis, Kevin Page

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00	Seminar Room 3

Using computer analyses to index and find recordings: Feature search and retrieval
The technique of using geometrical distance to quantify the similarity between sets of features, and finding recordings of interest within a larger collection.
David Lewis

19:00-20:30	Oxford University Museum of Natural History

Welcome drinks and poster session
Open to participants and speakers, this reception includes drinks and nibbles and will feature a poster session.

Workshop Programme
Tuesday 23 July

09:00-10:30	Seminar Room 3

Symbolic Music Analysis of Renaissance Counterpoint: current challenges
Frauke Jurgensen
The Baudelaire Song Project: Digital Analysis of Song Settings (09:45)
This session will present the digital tools used by the Baudelaire Song Project to analyse song settings of Charles Baudelaire's poetry. With a particular emphasis on Sonic Visualiser, the project team will show how they use digital humanities methodologies to understand the interaction between words and music and the changes wrought upon poetic texts when they are set to music.
Helen Abbott, Caroline Ardrey, Nina Rolland

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 3

Training computers automatically to recognise patterns in recordings (Practical machine learning)
How to use modern machine learning techniques to distil out patterns in large collections of audio, without exhaustive human audition. A hands-on session follows.
David Lewis, Stephen Downie

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 3

Methods for analysing large-scale resources and big music data
Managing and mitigating the problems of working with very large amounts of data, using music collections from the British Library to define explore, analyse and compare large datasets across historic, cultural, and musical dimensions.
Tillman Weyde

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Additional Lecture

Optional event. Pick up a ticket for the lecture of your choice from the Registration Desk (first come, first served). For details of lectures and rooms see the Timetable page.

18:30-19:30 approx.	Central Oxford

Walking tour of Oxford (if pre-booked)
Meet at the Martyr's Memorial at 18.15

Workshop Programme
Wednesday 24 July

09:00-10:30	Seminar Room 3

Digitised Notated Music: hands on with MEI
Introducing the MEI music notation formats: models of music notation they employ, the text critical apparatus they provide, and how to prepare documents in these formats.
David Lewis, with Andrew Hankinson

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 3

Digitised Notated Music: hands on with MEI (continued)
Annotating and structuring musicology knowledge using Linked Data
The Semantic Web can be thought of as an extension of the WWW in which sufficient meaning is captured and encoded such that computers can automatically match, retrieve, and link resources across the internet that are related to each other. In a scholarly context this offers significant opportunities for publishing, referencing, and re-using digital research output. In this session we introduce the principles and technologies behind this 'Linked Data', illustrated through examples from musicological study.
Kevin Page

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 3

Annotating and structuring musicology knowledge using Linked Data (continued)
Kevin Page

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Additional Lecture	

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Workshop Programme
Thursday 25 July

| 09:00-10:30 | Seminar Room 3 |

Automatic transcription of scanned notation: state of the art and applications; hands on with Gamera

Andrew Hankinson

| 10:30-11:00 Refreshment break | ARCO Building |
| 11:00-13:00 | Seminar Room 3 |

Computer processing of digital notated music: hands on with music21 Working with symbolic music data

Introducing the music21 toolkit to search for patterns in such music corpora and to prepare reproducible analytic tools. We learn its specialist query language and some basic Python programming techniques.

David Lewis

| 13:00-14:30 Lunch | Dining Hall |
| 14:30-15:30 | Seminar Room 3 |

Computer processing of digital notated music: hands on with music21 and programming in Python (continued)

David Lewis

| 15:30-16:00 Refreshment break | ARCO Building |
| 16:00-17:00 Additional Lecture | |

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Robert Iliffe, Oxford's Professor of History of Science and General Editor of the Newton Project, a comprehensive edition of all of Newton's printed and unpublished writings.

Workshop Programme
Friday 26 July

| 09:00-10:30 | Seminar Room 3 |

An overview of software and data management best practice

How to manage, revise, and collaborate on digital documents; how to revert files back to a previous state; and how to see when a particular change was introduced, and who was responsible.

David Lewis

A case study in Early Music, from digitisation to musicological research

Using an encoded test set of historical music prints, we describe what work is needed to make use of the resulting corpus and relevant external resources.

Tim Crawford

| 10:30-11:00 Refreshment break | ARCO Building |

| 11:00-13:00 | Seminar Room 3 |

Hands on: from digitisation to analysis, an end-to-end example

Tim Crawford, David Lewis, Andrew Hankinson, Kevin Page

| 13:00-14:30 Lunch | Dining Hall |

| 14:30-15:30 | Seminar Room 3 |

Round table discussion: applied digital musicology in your research

Tim Crawford, David Lewis, Andrew Hankinson, Kevin Page, Stephen Downie

| 15:30-16:00 Refreshment break | ARCO Building |

| 16:00-17:00 Closing Keynote | O'Reilly Lecture Theatre |

The Hitchhiker's Guide to the Future of Digital Humanities

We have only started scratching the surface of what digital methods can mean for humanities research. We can now start imagining new types of research questions that go beyond the sum of their 'digital' and 'humanities' parts-- to fundamentally change the nature of the humanities questions that we can ask.
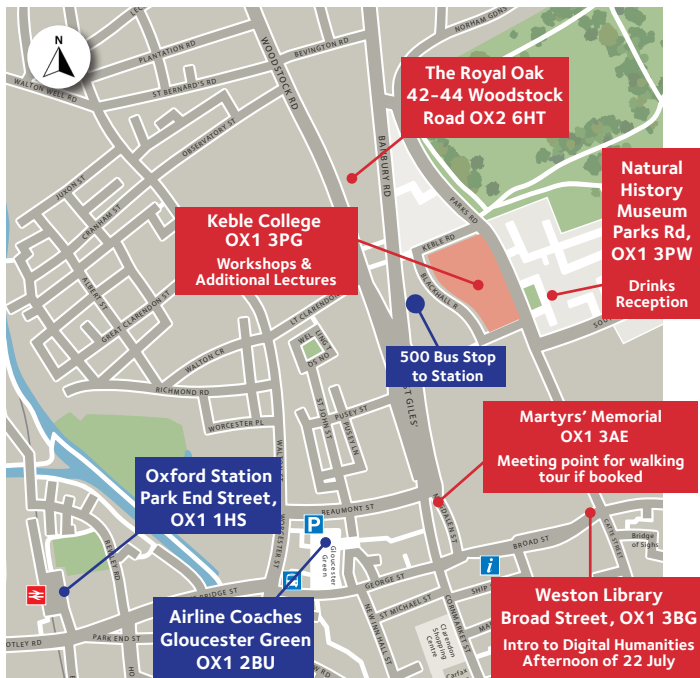
Marieke van Erp

| 17:30 Informal pub trip | The Royal Oak |

Optional evening event (no booking required).

Practical Help

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The Royal Oak
42-44 Woodstock
Road OX2 6HT

Natural
History
Museum
Parks Rd,
OX1 3PW

Drinks
Reception

Keble College
OX1 3PG

Workshops &
Additional Lectures

500 Bus Stop
to Station

Martyrs' Memorial
OX1 3AE

Meeting point for walking
tour if booked

Oxford Station
Park End Street,
OX1 1HS

Airline Coaches
Gloucester Green
OX1 2BU

Weston Library
Broad Street, OX1 3BG

Intro to Digital Humanities
Afternoon of 22 July

Useful information

Taxi: 001 TAXIS +44 1865 240000

Bus to train station: 500 from Banbury Road, every 15 - 20 mins
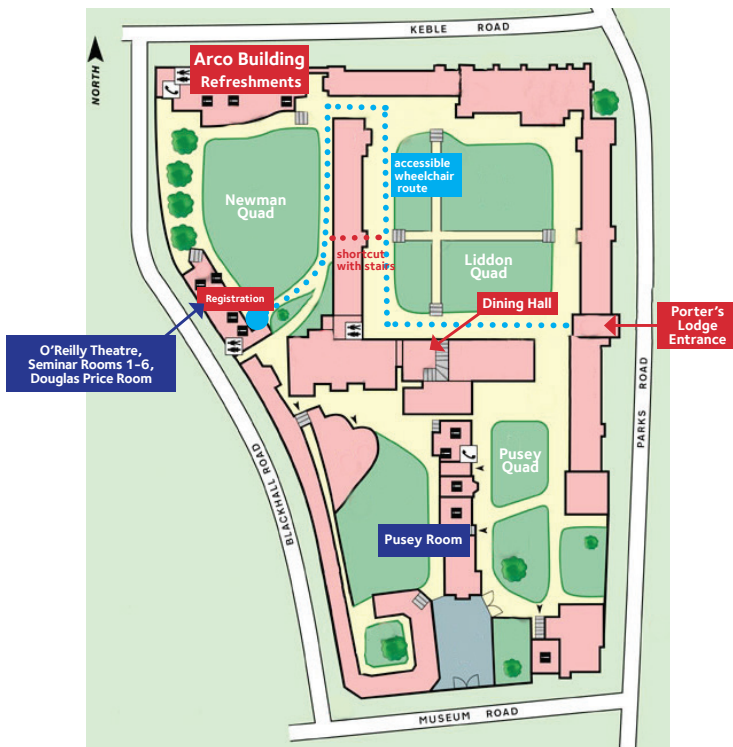
Coaches to Heathrow Airport:
Every 30-60 minutes from Gloucester Green Bus Station.
www.airline.oxfordbus.co.uk

Local interest websites:
www.oxfordcityguide.com
www.experienceoxfordshire.org

Emergency Services: 999

Keble College Plan

Workshop Locations

Douglas Price Room
From Text to Tech

Pusey Room
Humanities Data: Case Studies and
Approaches

O'Reilly Lecture Theatre
An Introduction to Digital Humanities

O'Reilly Seminar Rooms
An Introduction to the Text Encoding Initiative
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When Archives Become Digital
Digital Musicology
Crowdsourced Research in the Humanities
Linked Data for the Humanities

THE UNIVERSITY OF OXFORD

DIGITAL HUMANITIES
AT OXFORD SUMMER SCHOOL

HUMANITIES DATA:
CASE STUDIES AND APPROACHES

Convenors: John Southall, Rowan Wilson, Meriel Patrick, David Tomkins
www.dhoxss.net @dhoxss I #HumDat #DHOxSS2019

We are indebted to our sponsors without whom the Digital Humanities at Oxford Summer School would not be possible.

Oxford e-Research Centre

Bodleian Libraries
UNIVERSITY OF OXFORD

DEPARTMENT OF ENGINEERING SCIENCE

HUMANITIES DIVISION

OXFORD UNIVERSITY PRESS

TORCH
UNIVERSITY OF OXFORD
THE OXFORD RESEARCH CENTRE IN THE HUMANITIES

MFO MAISON FRANÇAISE D'OXFORD

The Alan Turing Institute

KING'S College LONDON
King's Digital Lab

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DEPARTMENT OF
**ENGINEERING
SCIENCE**

UNIVERSITY OF
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Barbara McGillivray

10:00-10:30 Refreshment break	ARCO Building

10:30-12:00	Pusey Room

A critical review of humanities data approaches
After a brief look ahead to the rest of the week, this session will provide a review of some key issues in the world of humanities data.
Neil Jefferies and Rowan Wilson

12:00-13:30 Lunch	Dining Hall

13:30-15:30	Pusey Room

Art making, digital curation and real-world value
Musicking and musicological data
An overview of a current qualitative interdisciplinary research project looking at the challenges of working with musicological data and current and future directions in digital musicology.
Laura Molloy and Daniel Bangert

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00	Pusey Room

Data IPR and regulation
Discussing how to be compliant around the general activities of data gathering without it becoming a chore.
Rowan Wilson

19:00-20:30	Oxford University Museum of Natural History

Welcome drinks and poster session
Open to participants and speakers, this reception includes drinks and nibbles and will feature a poster session.

Workshop Programme
Tuesday 23 July

09:00–10:30	Pusey Room

Framing digital objects with context and provenance (1)
Exploring the nature of context and provenance (for example for cultural and historical objects, which can be seen as a historical series of contexts), and considering how they might be modelled digitally.
Neil Jefferies

10:30–11:00 Refreshment break	ARCO Building

11:00–13:00	Pusey Room

Framing digital objects with context and provenance (2)
Continuation of earlier session.
Neil Jefferies

13:00–14:30 Lunch	Dining Hall

14:30–15:30	Pusey Room

From project to preservation: institutional data repositories
What happens to your data when your project is complete? This session provides an overview of archiving and data management from the perspective of institutional repositories.
David Tomkins

15:30–16:00 Refreshment break	ARCO Building

16:00–17:00 Additional Lecture	

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Walking tour of Oxford (if pre-booked)
Meet at the Martyr's Memorial at 18.15

Workshop Programme
Wednesday 24 July

09:00-10:30	Pusey Room

Keeping your digital data safe from harm, forever(?)
OOutlining some tried-and-tested workflows and tools which can significantly improve the chances of data remaining accessible, uncorrupted, and usable for future generations
Michael Popham & Polonsky Digital Preservation Fellows

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Pusey Room

Introduction to Relational Databases
This session looks at what a relational database is, and when it might be helpful to use one. We address some challenges posed by the sort of data often used in humanities projects. Hands-on exercises give participants a chance to put what they've learnt into practice.
Meriel Patrick

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Pusey Room

Introducing the International Image Interoperability Framework (IIIF)
This session will provide an overview of the community-driven standards and software of the IIIF. After an introduction to the underlying technology, we will look at implementations of several IIIF-based tools for comparing, annotating and remixing digitized images, in order to understand the potential of and challenges facing IIIF as a humanities research tool.
David De Roure

15:30-16:00 Refreshment break	ARCO Building
16:00-17:00 Additional Lecture	

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Workshop Programme
Thursday 25 July

09:00-10:30	Pusey Room

Taylor Digital editions
An overview of the Digital Editions course taught to students at the Taylor Institution Library. It demonstrates how to create, store, preserve and publish your digital objects for free!
Emma Huber and Frank Egerton

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Pusey Room

Reproducibility and Humanities data
Answering the question 'What does 'reproducibility'' mean in the context of the Digital Humanities? We take reference points from the more familiar spheres of provenance, collaborative resource development and software iteration.
Maja Zaloznik

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Pusey Room

Corpus linguistics
The sub-field of Corpus Linguistics is all about the data-driven exploration of language. This session will examine how the methods, tools and datasets of Corpus Linguistics can be of use to search, explore and interpret books, letters, speech, and other forms of discourse in digital form.
Martin Wynne

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Additional Lecture	

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Workshop Programme
Friday 26 July

09:00-10:30	Pusey Room

The Time is Now – Challenges and Solutions to Making Time-Based Media Digitally Accessible
We look at the challenges of providing digital access to time-based media. Introducing media preservation, collection processing and digital preservation principles, using open source tools.
Carla Arton

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Pusey Room

Data Visualisation
Taking examples from Oxford's Interactive Data Network and elsewhere, we look at good practice in the visualisation of Humanities data, and how it can increase publication impact and facilitate the creation of new knowledge.
Martin Hadley

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Pusey Room

Wrap-up session
Choosing the correct approach for your data can have a significant impact on the success of your research. Encouraging critical evaluation of standards and practices as much as you would evaluate your scholarly sources.
Meriel Patrick, John Southall, David Tomkins

15:30-16:00 Refreshment break	ARCO Building
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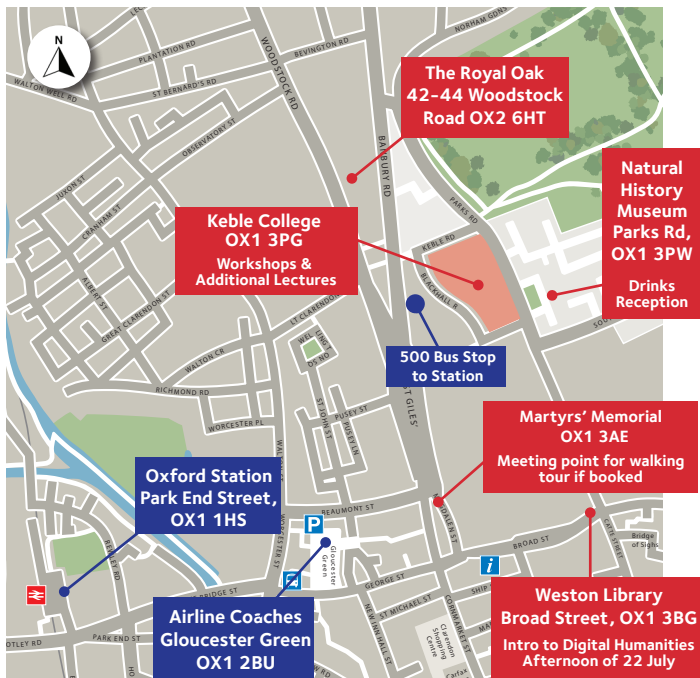*Marieke van Erp*

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The Royal Oak
42-44 Woodstock
Road OX2 6HT

Natural History Museum Parks Rd, OX1 3PW

Drinks Reception

Keble College OX1 3PG

Workshops & Additional Lectures

500 Bus Stop to Station

Martyrs' Memorial OX1 3AE

Meeting point for walking tour if booked

Oxford Station Park End Street, OX1 1HS

Airline Coaches Gloucester Green OX1 2BU

Weston Library Broad Street, OX1 3BG

Intro to Digital Humanities Afternoon of 22 July

Useful information

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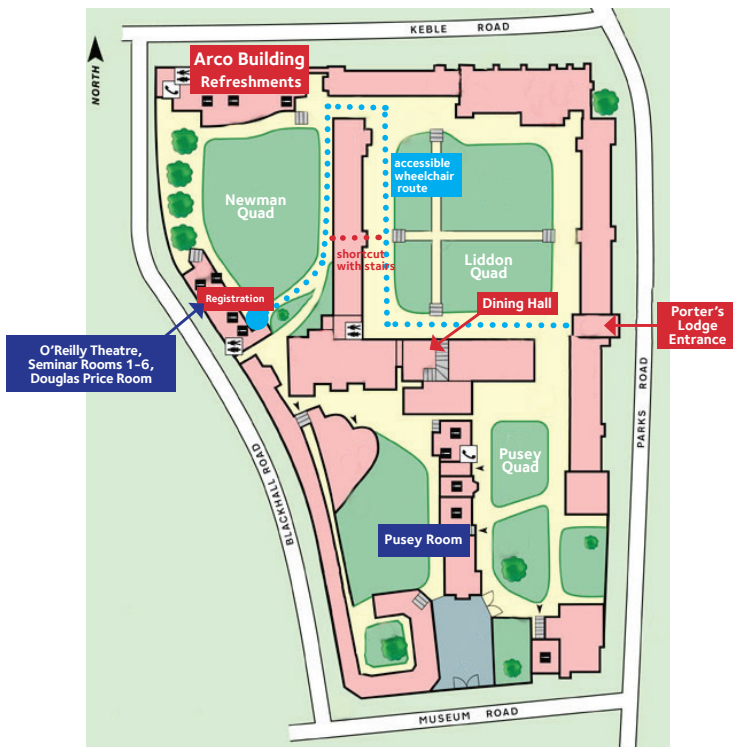
Coaches to Heathrow Airport:
Every 30-60 minutes from Gloucester Green Bus Station.
www.airline.oxfordbus.co.uk

Local interest websites:
www.oxfordcityguide.com
www.experienceoxfordshire.org

Emergency Services: 999

Keble College Plan

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Applied Data Analysis for the Humanities
When Archives Become Digital
Digital Musicology
Crowdsourced Research in the Humanities
Linked Data for the Humanities

dh @ oxford

UNIVERSITY OF OXFORD

THE UNIVERSITY OF OXFORD

DIGITAL HUMANITIES
AT OXFORD SUMMER SCHOOL

LINKED DATA FOR
DIGITAL HUMANITIES

Convenor: Terhi Nurmikko-Fuller
www.dhoxss.net ✈@dhoxss I #LD4DH #DHOxSS2019

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Oxford e-Research Centre

Bodleian Libraries
UNIVERSITY OF OXFORD

DEPARTMENT OF ENGINEERING SCIENCE

HUMANITIES
DIVISION

OXFORD
UNIVERSITY PRESS

TORCH
THE OXFORD RESEARCH CENTRE IN THE HUMANITIES
UNIVERSITY OF OXFORD

MFO
MAISON FRANÇAISE D'OXFORD

The Alan Turing Institute

KING'S College LONDON
King's Digital Lab

FAST

Software Sustainability Institute

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The origins of our Summer School go back to the 1990s and the training offered in the Guidelines of the Text Encoding Initiative. Digital research in the Humanities at Oxford, as all over the world, has broadened since then, and through our digital projects and collaborations, encompasses the ever-increasing range of technologies, ideas and collections – analogue and digital – that humanities research embraces.

DHOxSS is the highlight of the digital humanities year at Oxford, enabled by the generosity of our sponsors and our colleagues from around the University, including academic departments, libraries and museums, and our many collaborators. We look forward to sharing the Summer School with you all – participants and speakers from around the world, from many disciplinary and professional backgrounds, and at all career stages.

Professor David De Roure
DHOxSS Director and Executive Chair

The Summer School is organised by the Events Team, Department of Engineering Science, University of Oxford. **www.eng.ox.ac.uk**

DHOxSS 2019 TIMETABLE

	Monday 22 July	Tuesday 23 July	Wednesday 24 July	Thursday 25 July
Registration 08:00-09:00				
Opening Keynote 09:00-10:00		Workshops 09:00-10:30		
Refreshment break 10:00-10:30				
Workshops 10:30-12:00		Refreshment break 10:30-11:00		
		Workshops 11:00-13:00		
Lunch 12:00-13:30				
		Lunch 13:00-14:30		
Workshops 13:30-15:30		Workshops 14:30-15:30		
	Refreshment break 15:30-16:00			
Workshops 16:00-17:00	Additional lectures 16:00-17:00			Cl
	Close 17:00			
Welcome Drinks and Poster Session 19:00-20:30	Walking tour of Oxford 18:30-19:30	Free time	TORCH lecture 18:00-19:30	

Additional Lectures

Tuesday 23 July 16:00-17:00
How to write a Constitution: Exploring the Records of Multi-party Negotiations
Douglas Price Room

Examining the software platform used in the Quill Project, an interdisciplinary project that brings together historians and lawyers with visualization and AI specialists.
Nicholas Cole, Pembroke College

The Imagination of Ada Lovelace and an Experimental Humanities
O'Reilly Lecture Theatre

Tracing some paths the ideas of Ada Lovelace and her imagination of Charles Babbage's Analytical Engine might have taken, focussing on music and creativity. We follow Lovelace's idea that "the engine might compose elaborate and scientific pieces of music of any degree of complexity or extent".
Pip Willcox, National Archives and David De Roure, Oxford e-Research Centre

Wednesday 24 July 16:00-17:00
Wikidata: knowledge representation the easy way
Douglas Price Room

Wikidata, a knowledge base describing around 50 million things, links to thousands of sources. Here we demonstrate some tips and short-cuts in querying Wikidata or linking it to your own research. (No knowledge of RDF or SPARQL is assumed.)
Martin Poulter, Wikimedian

Digital Humanities Curriculum Panel and Discussion
O'Reilly Lecture Theatre

What are the key topics in DH research training? A chance to have your say.
David De Roure, Oxford e-Research Centre, and other convenors

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Art and Neuroscience: change blindness, can you spot the difference?
Douglas Price Room

Describing an experiment at the Ashmolean Museum in Oxford that compares the perception of real-world and on-screen artefacts.
Chrystalina Antoniades, Nuffield Department of Clinical Neurosciences

Reproducible and Sustainable Research Panel
O'Reilly Lecture Theatre

How do we sustain data and software in Digital Humanities?
From this year's workshop leaders

Thursday 25 July 18:00-19:30
TORCH Lecture
O'Reilly Lecture Theatre

Robert Iliffe, Oxford's Professor of History of Science and General Editor of the Newton Project, a comprehensive edition of all of Newton's printed and unpublished writings.

Full details: www.dhoxss.net/lectures

Workshop Programme
Monday 22 July

09:00-10:00 Opening Keynote	O'Reilly Lecture Theatre

Shall the twain meet? Blending Digital Humanities and Computational Sciences
Focusing on the analysis of historical textual collections and highlighting the challenges and the mutual benefits that arise when humanists work together with computational scientists.
Barbara McGillivray

10:00-10:30 Refreshment break	ARCO Building
10:30-12:00	Seminar Room 6

Introduction to #LD4DH Workshop at DHOxSS
Introducing the practical requirements of setting up, completing, and maintaining a Linked Data project, comparing Linked Data to other alternatives such as relational databases and XML.
Terhi Nurmikko-Fuller, John Pybus, Graham Klyne

12:00-13:30 Lunch	Dining Hall
13:30-15:30	Seminar Room 6

Introduction to Linked Data - theories and practice
Overview of the RDF data model, discussing jargon, acronyms, the triple datamodel; examples of knowledge graphs and how various components form part of a cohesive workflow.
Terhi Nurmikko-Fuller, John Pybus, Graham Klyne

15:30-16:00 Refreshment break	ARCO Building
16:00-17:00	Seminar Room 6

Sharing the wealth, Linking Discipline: Linked Open Data for Numismatics
Introducing the creation and progress of Nomisma.org, a namespace and ontology for numismatic concepts, and other exciting new tools that are being built within the world of numismatic Linked Open Data.
Andrew Meadows

19:00-20:30	Oxford University Museum of Natural History

Welcome drinks and poster session
Open to participants and speakers, this reception includes drinks and nibbles and will feature a poster session.

Workshop Programme
Tuesday 23 July

09:00-10:30	Seminar Room 6

Ontologies - in theory

In this session, we discuss the purpose and functionality of ontologies, and look at some well-known examples of ontologies used in Digital Humanities projects and the GLAM sector. Participants will begin to develop an ontological structure of their own in groups, capturing the knowledge within a given sample dataset, or a dataset of their own (if applicable).

Terhi Nurmikko-Fuller, John Pybus, Graham Klyne

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Seminar Room 6

Ontology - in practice

Participants will finalise their ontological design, implement it in Protege, demonstrate their model to the rest of the group, and export it as .TTL in preparation for tomorrow's activitites.

Terhi Nurmikko-Fuller, John Pybus, Graham Klyne

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Seminar Room 6

Linked Data for Digital Musicology

Introducing applications of Linked Data to Digital Musicology, illustrated through four case studies.

Kevin Page

15:30-16:00 Refreshment break	ARCO Building
16:00-17:00 Additional Lecture	

Optional event. Pick up a ticket for the lecture of your choice from the Registration Desk (first come, first served). For details of lectures and rooms see the Timetable page.

18:30-19:30 approx.	Central Oxford

Walking tour of Oxford (if pre-booked)

Meet at the Martyr's Memorial at 18.15

Workshop Programme
Wednesday 24 July

09:00-10:30	Seminar Room 6

RDF production
Introduction to Web-Karma, in which participants will produce RDF based on the ontology they designed and implemented the day before. They will also have a chance to edit and finalise their ontology.
Daniel Bangert, Terhi Nurmikko-Fuller, John Pybus, Graham Klyne

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Seminar Room 6

RDF production
Participants will use Web-Karma to complete their RDF-production workflow and upload their triples into Blazegraph.
Daniel Bangert, Terhi Nurmikko-Fuller, John Pybus, Graham Klyne

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Seminar Room 6

An insight into projects that combine Linked Data methodologies and technologies with data from Digital Libraries.
Stephen Downie

15:30-16:00 Refreshment break	ARCO Building
16:00-17:00 Additional Lecture	

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Workshop Programme
Thursday 25 July

09:00-10:30	Seminar Room 6

SPARQL - in theory & in practice
Terhi Nurmikko-Fuller, John Pybus, Graham Klyne

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 6

Linked Open Geodata with Recogito
Introducing the use of Recogito to georesolve place references in text, images and tabular data. Learning how to create semantic annotations.
Valeria Vitale

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 6

Consuming and applying LOD for a specific research question
A research project which deploys Linked Open Data technologies to overcome the impediments regarding data processability, accessibility and interoperability in archaeological scholarship, which investigates cultural contact in Early Roman Ulterior Baetica from 3rd ct. BCE to 1st ct. AD.
Paula Granados-García

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Additional Lecture	

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18:00-19:30 TORCH Lecture Oxford	O'Reilly Lecture Theatre

Robert Iliffe, Oxford's Professor of History of Science and General Editor of the Newton Project, a comprehensive edition of all of Newton's printed and unpublished writings.

Workshop Programme
Friday 26 July

09:00-10:30	Seminar Room 6

The Gap between Digital and Humanities: Issues for the Semantic Web (theory)
How the humanities can take a more active role in the design of digital systems, particularly using the Semantic Web and Linked Data, so that they reflect the complex needs of subject experts.
Dominic Oldman, Diana Tanase

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Seminar Room 6

The Human Curated Knowledge Graph (practice)
Constructing a Semantic Web knowledge base starting from an empty canvas and using a visual knowledge mapping tool.
Dominic Oldman, Diana Tanase

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Seminar Room 6

Final workshop session
The principles behind modelling with CIDOC-CRM and its use in integrating heritage collection data, discussing benefits of large-scale reasoning and inference in relation to knowledge progression and argument making.
Athanasios Velios

15:30-16:00 Refreshment break	ARCO Building
16:00-17:00 Closing Keynote	O'Reilly Lecture Theatre

The Hitchhiker's Guide to the Future of Digital Humanities
We have only started scratching the surface of what digital methods can mean for humanities research. We can now start imagining new types of research questions that go beyond the sum of their 'digital' and 'humanities' parts-- to fundamentally change the nature of the humanities questions that we can ask.
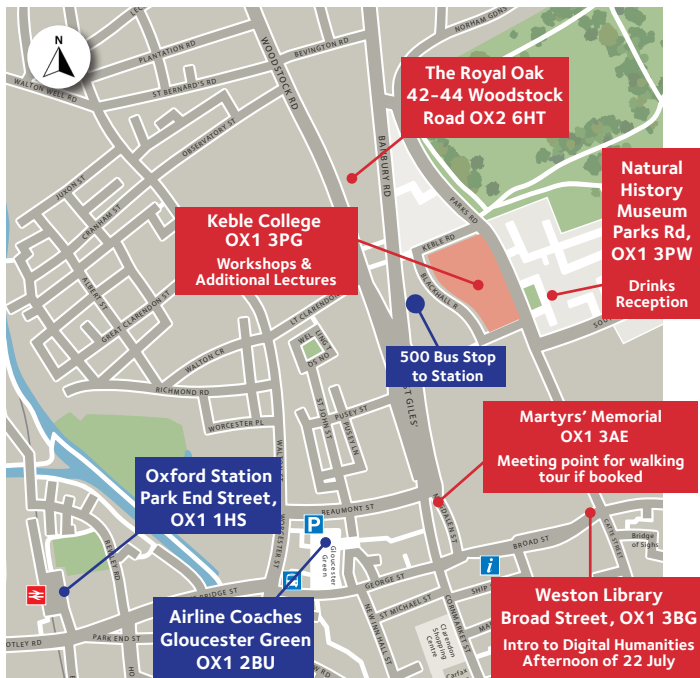*Marieke van Erp*

17:30 Informal pub trip	The Royal Oak

Optional evening event (no booking required).

Practical Help

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The Royal Oak
42-44 Woodstock
Road OX2 6HT

Natural
History
Museum
Parks Rd,
OX1 3PW

Drinks
Reception

Keble College
OX1 3PG

Workshops &
Additional Lectures

500 Bus Stop
to Station

Martyrs' Memorial
OX1 3AE

Meeting point for walking
tour if booked

Oxford Station
Park End Street,
OX1 1HS

Airline Coaches
Gloucester Green
OX1 2BU

Weston Library
Broad Street, OX1 3BG

Intro to Digital Humanities
Afternoon of 22 July

Useful information

Taxi: 001 TAXIS +44 1865 240000

Bus to train station: 500 from Banbury Road, every 15 - 20 mins
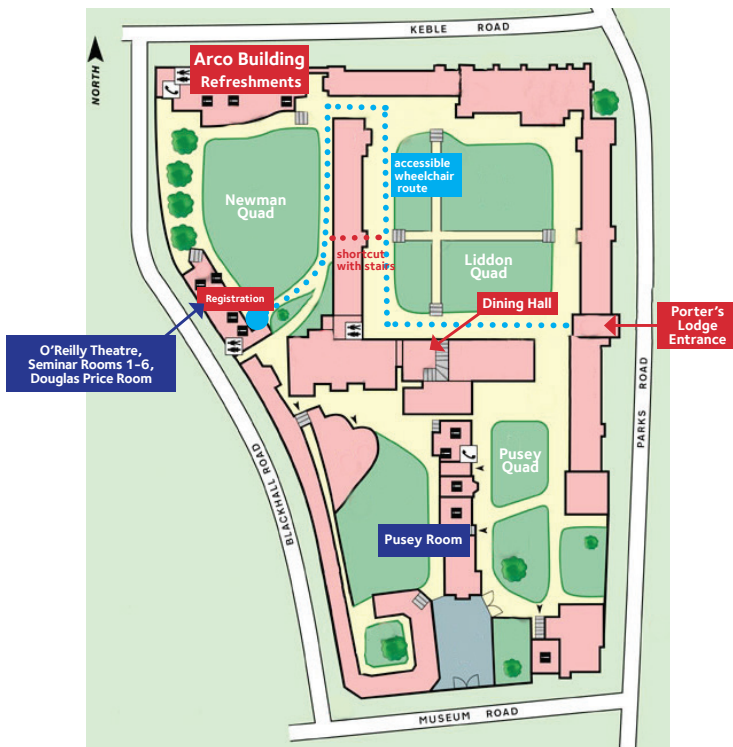
Coaches to Heathrow Airport:
Every 30-60 minutes from Gloucester Green Bus Station.
www.airline.oxfordbus.co.uk

Local interest websites:
www.oxfordcityguide.com
www.experienceoxfordshire.org

Emergency Services: 999

Keble College Plan

Workshop Locations

Douglas Price Room
From Text to Tech

Pusey Room
Humanities Data: Case Studies and
Approaches

O'Reilly Lecture Theatre
An Introduction to Digital Humanities

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An Introduction to the Text Encoding Initiative
Applied Data Analysis for the Humanities
When Archives Become Digital
Digital Musicology
Crowdsourced Research in the Humanities
Linked Data for the Humanities

THE UNIVERSITY OF OXFORD

DIGITAL HUMANITIES
AT OXFORD SUMMER SCHOOL

AN INTRODUCTION TO THE TEXT ENCODING INITIATIVE

Convenors: Huw Jones, Yasmin Faghihi, Matthew Holford
www.dhoxss.net @dhoxss I #TEI #DHOxSS2019

We are indebted to our sponsors without whom the Digital Humanities at Oxford Summer School would not be possible.

Oxford e-Research Centre

Bodleian Libraries
UNIVERSITY OF OXFORD

DEPARTMENT OF
ENGINEERING
SCIENCE

HUMANITIES
DIVISION

OXFORD
UNIVERSITY PRESS

TORCH
UNIVERSITY OF OXFORD
THE OXFORD RESEARCH CENTRE IN THE HUMANITIES

MFO
MAISON FRANÇAISE D'OXFORD

The Alan Turing Institute

KING'S College LONDON
King's Digital Lab

FAST

Software Sustainability Institute

RIKSBANKENS JUBILEUMSFOND
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Friday
26 July

Closing Keynote
16:00-17:00

Informal
pub trip
17:30

Workshop Programme
Monday 22 July

09:00-10:00 Opening Keynote   **O'Reilly Lecture Theatre**

Shall the twain meet? Blending Digital Humanities and Computational Sciences
Focusing on the analysis of historical textual collections and highlighting the challenges and the mutual benefits that arise when humanists work together with computational scientists.
Barbara McGillivray

10:00-10:30 Refreshment break   **ARCO Building**

10:30-12:00   **Seminar Room 1**

What is TEI and why you might want to use it? The principles of XML, mark-up and TEI and how they relate to research questions
Yasmin Faghihi, Matthew Holford and Huw Jones

12:00-13:30 Lunch   **Dining Hall**

13:30-15:30   **Seminar Room 1**

Exercise: Creating and editing TEI documents. The basics of TEI files using the Oxygen XML editor
Yasmin Faghihi, Matthew Holford and Huw Jones

15:30-16:00 Refreshment break   **ARCO Building**

16:00-17:00   **Bahari Room Weston Library**

Primary source documents and encoding issues (Weston Library)
Taking a look at some primary source documents from the Bodleian collections in the Bahari Room at the Weston Library. Please assemble at the ARCO Building by 15.50. Matthew Holford will meet you to take you to the Weston Library.
Matthew Holford

19:00-20:30   **Oxford University Museum of Natural History**

Welcome drinks and poster session
Open to participants and speakers, this reception includes drinks and nibbles and will feature a poster session.

Workshop Programme
Tuesday 23 July

09:00-10:30	Seminar Room 1

What to mark up and why?
What are the options for TEI markup and how to decide what markup to use?
Yasmin Faghihi, Matthew Holford and Huw Jones

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 1

Exercise: A practical guide to TEI markup
Hands on exercises and examples of TEI markup.
Yasmin Faghihi, Matthew Holford and Huw Jones

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 1

Case study: The Institute for Textual Scholarship and Editing
Hugh Houghton

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Additional Lecture

Optional event. Pick up a ticket for the lecture of your choice from the Registration Desk (first come, first served). For details of lectures and rooms see the Timetable page.

18:30-19:30 approx.	Central Oxford

Walking tour of Oxford (if pre-booked)
Meet at the Martyr's Memorial at 18.15

Workshop Programme
Wednesday 24 July

09:00-10:30	Seminar Room 1

Describing and transcribing manuscripts using TEI
Using the msDesc module to encode manuscript descriptions.
Yasmin Faghihi, Matthew Holford and Huw Jones

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 1

Exercise: Encoding manuscripts
Practical exercises based on real life manuscripts.
Yasmin Faghihi, Matthew Holford and Huw Jones

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 1

Case Study: Using TEI manuscript data to answer research questions
Luca Guariento

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Additional Lecture

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Workshop Programme
Thursday 25 July

| 09:00-10:30 | Seminar Room 1 |

Elizabeth Smith: Darwin Correspondence Project
Elizabeth Smith

| 10:30-11:00 Refreshment break | ARCO Building |

| 11:00-13:00 | Seminar Room 1 |

Exercise: Encoding correspondence
Practical examples and exercises of encoding letters with the correspDesc module.
Elizabeth Smith

| 13:00-14:30 Lunch | Dining Hall |

| 14:30-15:30 | Seminar Room 1 |

Case study: The Darwin Correspondence Project
Elizabeth Smith

| 15:30-16:00 Refreshment break | ARCO Building |

| 16:00-17:00 Additional Lecture |

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Workshop Programme
Friday 26 July

09:00-10:30	Seminar Room 1

Transforming TEI with XSLT
Using XSLT to transform TEI into HTML for publication on the web.
Andrew Morrison

10:30-11:00 Refreshment break	ARCO Building

11:00-13:00	Seminar Room 1

Exercise: Basic transformations with XSLT
Practical exercises on creating web pages using XSLT
Andrew Morrison, Mike Hawkins

13:00-14:30 Lunch	Dining Hall

14:30-15:30	Seminar Room 1

Case study: The Newton Project
Rob Iliffe and Mike Hawkins

15:30-16:00 Refreshment break	ARCO Building

16:00-17:00 Closing Keynote	O'Reilly Lecture Theatre

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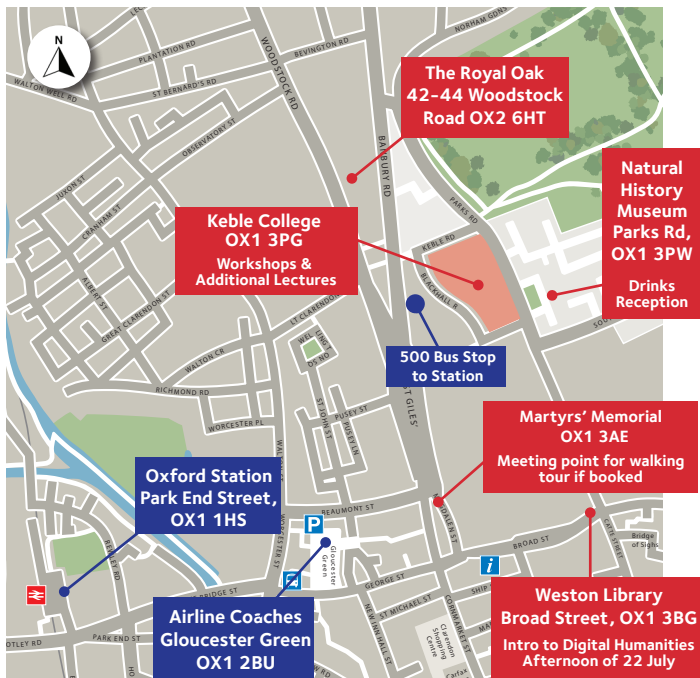*Marieke van Erp*

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The Royal Oak
42-44 Woodstock
Road OX2 6HT

Natural
History
Museum
Parks Rd,
OX1 3PW

Drinks
Reception

Keble College
OX1 3PG

Workshops &
Additional Lectures

500 Bus Stop
to Station

Martyrs' Memorial
OX1 3AE

Meeting point for walking
tour if booked

Oxford Station
Park End Street,
OX1 1HS

Airline Coaches
Gloucester Green
OX1 2BU

Weston Library
Broad Street, OX1 3BG

Intro to Digital Humanities
Afternoon of 22 July

Useful information

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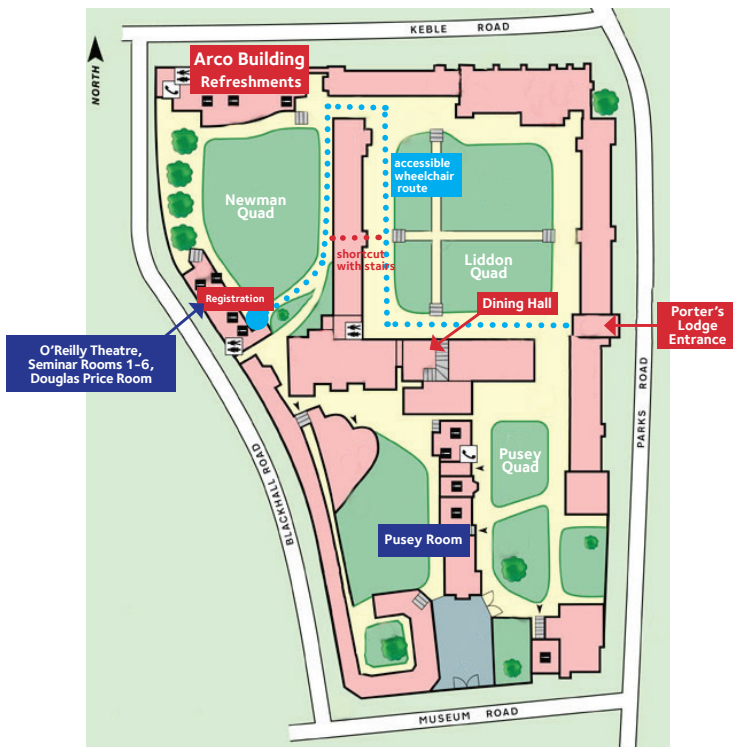Every 30-60 minutes from Gloucester Green Bus Station.
www.airline.oxfordbus.co.uk

Local interest websites:
www.oxfordcityguide.com
www.experienceoxfordshire.org

Emergency Services: 999

Keble College Plan

Keble College Plan map showing buildings and quads. Labels include: KEBLE ROAD, Arco Building Refreshments, accessible wheelchair route, Newman Quad, Liddon Quad, shortcut with stairs, Registration, Dining Hall, Porter's Lodge Entrance, O'Reilly Theatre, Seminar Rooms 1–6, Douglas Price Room, BLACKHALL ROAD, PARKS ROAD, Pusey Quad, Pusey Room, MUSEUM ROAD, NORTH.

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Digital Musicology
Crowdsourced Research in the Humanities
Linked Data for the Humanities

DIGITAL HUMANITIES
AT OXFORD SUMMER SCHOOL

FROM TEXT TO TECH

Convenors: Barbara McGillivray, Gard Jenset, Mariona Coll Ardanuy
www.dhoxss.net @dhoxss I #text2tech #DHOxSS2019

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Tracing some paths the ideas of Ada Lovelace and her imagination of Charles Babbage's Analytical Engine might have taken, focussing on music and creativity. We follow Lovelace's idea that "the engine might compose elaborate and scientific pieces of music of any degree of complexity or extent".
Pip Willcox, National Archives and David De Roure, Oxford e-Research Centre

Wednesday 24 July 16:00-17:00
Wikidata: knowledge representation the easy way
Douglas Price Room

Wikidata, a knowledge base describing around 50 million things, links to thousands of sources. Here we demonstrate some tips and short-cuts in querying Wikidata or linking it to your own research. (No knowledge of RDF or SPARQL is assumed.)
Martin Poulter, Wikimedian

Digital Humanities Curriculum Panel and Discussion
O'Reilly Lecture Theatre

What are the key topics in DH research training? A chance to have your say.
David De Roure, Oxford e-Research Centre, and other convenors

Thursday 25 July 16:00-17:00
Art and Neuroscience: change blindness, can you spot the difference?
Douglas Price Room

Describing an experiment at the Ashmolean Museum in Oxford that compares the perception of real-world and on-screen artefacts.
Chrystalina Antoniades, Nuffield Department of Clinical Neurosciences

Reproducible and Sustainable Research Panel
O'Reilly Lecture Theatre

How do we sustain data and software in Digital Humanities?
From this year's workshop leaders

Thursday 25 July 18:00-19:30
TORCH Lecture
O'Reilly Lecture Theatre

Robert Iliffe, Oxford's Professor of History of Science and General Editor of the Newton Project, a comprehensive edition of all of Newton's printed and unpublished writings.

Full details: www.dhoxss.net/lectures

Workshop Programme
Monday 22 July

09:00-10:00 Opening Keynote	O'Reilly Lecture Theatre

Shall the twain meet? Blending Digital Humanities and Computational Sciences
Focusing on the analysis of historical textual collections and highlighting the challenges and the mutual benefits that arise when humanists work together with computational scientists.
Barbara McGillivray

10:00-10:30 Refreshment break	ARCO Building
10:30-12:00	Douglas Price Room

Introduction to programming in Python
A basic introduction to programming for digital humanities using the Python language, covering assignments and variables, data types, conditional statements, and reading/writing data.
Gard Jenset

12:00-13:30 Lunch	Dining Hall
13:30-15:30	Douglas Price Room

Introduction to programming in Python (continued)
A continuation of the morning's session.
Barbara McGillivray

15:30-16:00 Refreshment break	ARCO Building
16:00-17:00	Douglas Price Room

Introduction to Corpora
An introduction to the main concepts of corpus linguistics, including corpus creation and corpus processing for research in Digital Humanities.
Barbara McGillivray

19:00-20:30	Oxford University Museum of Natural History

Welcome drinks and poster session
Open to participants and speakers, this reception includes drinks and nibbles and will feature a poster session.

Workshop Programme
Tuesday 23 July

09:00-10:30	Douglas Price Room

Basic text processing with Python
An introduction to working with linguistic data in Python. Topics include simple regular expressions and other methods for handling text data.
Mariona Coll Ardanuy

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Douglas Price Room

Data structures in Python
Basic data structures like lists and dictionaries in Python, with practical examples.
Mariona Coll Ardanuy

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Douglas Price Room

Identifying the author of a document
Introducing an approach to "forensic stylometry", ie identifying the author of a text, based on a corpus of documents. In a few hours we can build a classifier to identify authorship
Tom Wood

15:30-16:00 Refreshment break	ARCO Building
16:00-17:00 Additional Lecture	

Optional event. Pick up a ticket for the lecture of your choice from the Registration Desk (first come, first served). For details of lectures and rooms see the Timetable page.

18:30-19:30 approx.	Central Oxford

Walking tour of Oxford (if pre-booked)
Meet at the Martyr's Memorial at 18.15

Workshop Programme
Wednesday 24 July

09:00-10:30	Douglas Price Room

Introduction to Natural Language Processing (NLP) in Python
Introducing the NLTK library and showing how it can be used for tasks such as stemming, part-of-speech tagging, and lemmatization with Python.
Barbara McGillivray

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Douglas Price Room

Sentiment analysis in Python
An exercise in which participants will learn how to perform basic sentiment analysis on textual data.
Mariona Coll Ardanuy

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Douglas Price Room

Word Embeddings and Python in corpus research: the dative alternation in spoken British English
An introduction to how studies in corpus linguistics can use Python and available resources like word embeddings in a supporting role to an annotated corpus.

15:30-16:00 Refreshment break	ARCO Building
16:00-17:00 Additional Lecture	

Optional event. Pick up a ticket for the lecture of your choice from the Registration Desk (first come, first served). For details of lectures and rooms see the Timetable page.

Workshop Programme
Thursday 25 July

09:00-10:30	Douglas Price Room

Parsing HTML and XML documents
Python can be used to extract text from structured documents like HTML and XML. This session gives an introduction to how this is done.
Gard Jenset

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Douglas Price Room

Extracting semantic information from text
The session gives an introduction to how Python and the NLTK library can be used to extract semantic information from unstructured text and measure similarity between documents.
Barbara McGillivray

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Douglas Price Room

Using the Oxford English Dictionary to explore linguistic features of texts
Using data derived from the Oxford English Dictionary (OED) to explore aspects of the history of English. The talk includes practical examples of Python code to connect to and query the OED API, and to process the response.
James McCracken

15:30-16:00 Refreshment break	ARCO Building
16:00-17:00 Additional Lecture	

Optional event. Pick up a ticket for the lecture of your choice from the Registration Desk (first come, first served). For details of lectures and rooms see the Timetable page.

18:00-19:30 TORCH Lecture Oxford	O'Reilly Lecture Theatre

Robert Iliffe, Oxford's Professor of History of Science and General Editor of the Newton Project, a comprehensive edition of all of Newton's printed and unpublished writings.

Workshop Programme
Friday 26 July

09:00-10:30	Douglas Price Room

Networks in Python
The session introduces basic concepts of network theory, and shows how structured textual data can be turned into networks.
Mariona Coll Ardanuy

10:30-11:00 Refreshment break	ARCO Building
11:00-13:00	Douglas Price Room

Problem solving session
The session will provide an opportunity to apply the skills taught during the week, with instructors present to provide guidance.
Mariona Coll Ardanuy, Gard Jenset, Barbara McGillivray

13:00-14:30 Lunch	Dining Hall
14:30-15:30	Douglas Price Room

Group presentations from students

15:30-16:00 Refreshment break	ARCO Building
16:00-17:00 Closing Keynote	O'Reilly Lecture Theatre

The Hitchhiker's Guide to the Future of Digital Humanities
We have only started scratching the surface of what digital methods can mean for humanities research. We can now start imagining new types of research questions that go beyond the sum of their 'digital' and 'humanities' parts-- to fundamentally change the nature of the humanities questions that we can ask.
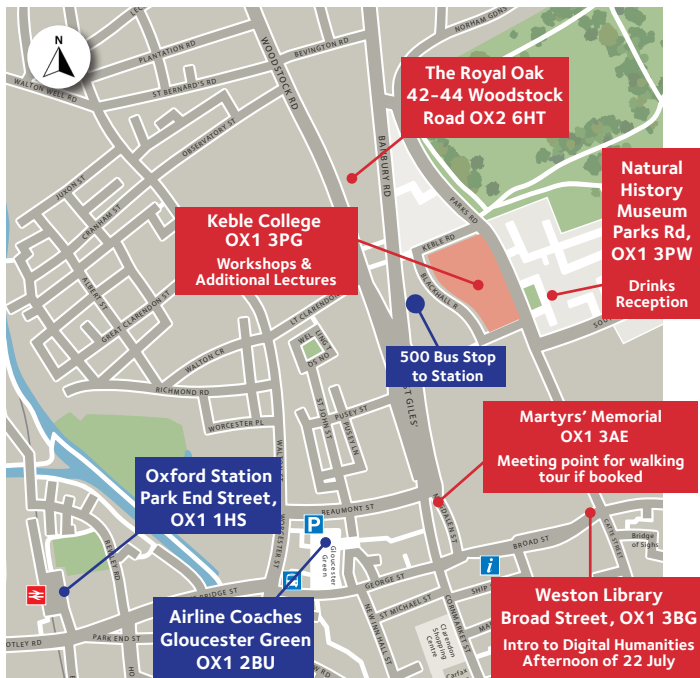*Marieke van Erp*

17:30 Informal pub trip	The Royal Oak

Optional evening event (no booking required)

Practical Help

For all enquiries and concerns, please contact a member of the Events Team (wearing blue polo shirts) who will be at Keble College during registration and at breaks. If you are unable to locate anyone, please call the Oxford e-Research Centre reception on +44 1865 610600 or email events@oerc.ox.ac.uk

For the DHOxSS code of Conduct, please see: https://dhoxss.net/code-of-conduct

The Royal Oak
42-44 Woodstock
Road OX2 6HT

Natural History Museum Parks Rd, OX1 3PW

Drinks Reception

Keble College OX1 3PG

Workshops & Additional Lectures

500 Bus Stop to Station

Martyrs' Memorial OX1 3AE

Meeting point for walking tour if booked

Oxford Station Park End Street, OX1 1HS

Airline Coaches Gloucester Green OX1 2BU

Weston Library Broad Street, OX1 3BG

Intro to Digital Humanities Afternoon of 22 July

Useful information

Taxi: 001 TAXIS +44 1865 240000

Bus to train station: 500 from Banbury Road, every 15 - 20 mins
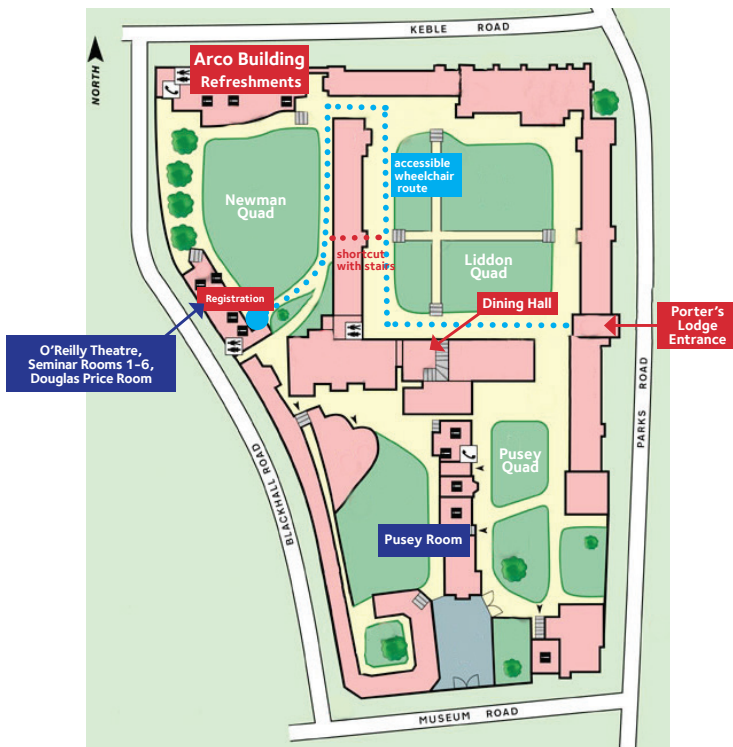
Coaches to Heathrow Airport:
Every 30-60 minutes from Gloucester Green Bus Station.
www.airline.oxfordbus.co.uk

Local interest websites:
www.oxfordcityguide.com
www.experienceoxfordshire.org

Emergency Services: 999

Keble College Plan

Workshop Locations

Douglas Price Room
From Text to Tech

Pusey Room
Humanities Data: Case Studies and Approaches

O'Reilly Lecture Theatre
An Introduction to Digital Humanities

O'Reilly Seminar Rooms
An Introduction to the Text Encoding Initiative
Applied Data Analysis for the Humanities
When Archives Become Digital
Digital Musicology
Crowdsourced Research in the Humanities
Linked Data for the Humanities