COURSE DETAIL

COMPUTATIONAL THINKING FOR THE ARTS AND CULTURE

Country
Netherlands

Host Institution
Maastricht University – University College Maastricht

Program(s)
University College Maastricht

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Communication

UCEAP Course Number
104

UCEAP Course Suffix

UCEAP Official Title
COMPUTATIONAL THINKING FOR THE ARTS AND CULTURE

UCEAP Transcript Title
COMPUTATNL THINKING

UCEAP Quarter Units
6.00

UCEAP Semester Units
4.00

Course Description

This course is designed for students interested in the relationship between how digital objects (with a focus on the historical and cultural) are created and consumed, as well as how novel tools and methods provide opportunities for new types of analysis, research, and dissemination. By introducing students to the basics of digitization, data analysis, and representation, this course also explores the theoretical underpinnings, biases, and lacunae of working with data, while teaching them to be more critically reflective of digital tools, processes and products. Ultimately, this course is an introduction to the field of Digital Humanities which explores the impact, opportunities, and affordances of the digitization of our cultural heritage, providing innovative means to approach traditional fields of expertise. The course explores digitization from three perspectives: Digitization, Analysis, and Representation. The first half of the course focuses on digitization, with particular reference to 3D, placing emphasis on the field of computational imaging; a field in computer science that studies the computational extraction of information from digital photographs. Students develop 3D recording skills by completing a mini group project, and reflect on the process in terms of what is gained and lost by representing physical objects within virtual computer interfaces. The second half of the course focuses on text analysis. A mini big data project provides students with hands-on experience and understanding of the affordances and limitations of text analysis methods. It explores how the representation of text in more visual formats, which are typically removed from its semantic contexts, offers opportunities for both new insights as well as misrepresentation. An overarching goal of the course is to is to help students become more savvy users of digital information including the implications and challenges that methods and technologies pose to conventional research, analysis, and publication in the arts, humanities, and social sciences, including issues such as copyright, transparency, authenticity, and bias.

Language(s) of Instruction

English

Host Institution Course Number

HUM2059

Host Institution Course Title

COMPUTATIONAL THINKING FOR THE ARTS AND CULTURE

Host Institution Course Details

Host Institution Campus

University College Maastricht

Host Institution Faculty

Host Institution Degree

Host Institution Department

Humanities

Course Last Reviewed

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