

BHA-Humanities Analytics

Fall 2023

Bachelor of Humanities and Arts (BHA)

Dietrich College (DC) Concentration in Humanities Analytics

81 units (minimum)

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The human experience that is traditionally at the core of a humanities education is being dramatically transformed by the emergence of big data, digital platforms, computational thinking, and digital connectivity. Spurred by such developments, the concentration in Humanities Analytics (HumAn), offered by the Department of English, trains students in the processes involved in analyzing, digitizing, quantifying and visualizing different types of humanities and cultural phenomena, including printed books, manuscripts, historical records, art, music and film. The HumAn concentration trains students to work with cultural objects (like texts, film, historical records, etc.) but also to turn words and images into data; to move from one cultural object (like a Victorian novel, for instance) to a corpus consisting of tens of thousands of other novels published in the same period, and to combine close reading with distant reading (aggregating and analyzing massive amounts of data) for maximum insight and accuracy.

Students will develop a broad technical understanding of state-of-the-art computer-assisted methods for humanistic study, such as: social network analysis, text analysis and data mining, topic modeling, classification techniques and visualization. Students will also investigate the histories and historical contexts of such methods, learning to consider their applicability in specific domains. Finally, students will learn to turn a critical eye on the corpora and infrastructures that increasingly underpin humanistic research.

BHA students take at least 9 courses in their DC concentration, for a minimum of 81 units. A completed DC Concentration Declaration Sheet must be approved by the concentration advisor and submitted to the BXA office by spring mid-semester break of the student's sophomore year. BHA students who are admitted through internal transfer must have chosen a DC concentration at the time of their application, which serves as declaration.

Required Courses

(5 courses, 45 units)

76-275	Introduction to Critical Writing	9
76-380	Methods in Humanities Analytics	9

Three core courses from the following list:

76-314	Data Stories	9
76-388	Coding for Humanists	9
76-425	Rhetoric, Science, and the Public Sphere	9
76-429	Introduction to Digital Humanities	9
88-275	Bubbles: Data Science for Human Minds	9
88-300	Programming and Data Analysis for Social Scientists	9

Electives

(4 courses, 36 units minimum)

Choose four courses from the following categories. One course must come from List A, two from List B, and the fourth in consultation with your Humanities Analytics advisor.

List A: One elective course relevant to digital and analytics methods (at least 9 units):

05-391	Designing Human Centered Software	12
05-434/11-344	Machine Learning in Practice	12
11-411	Natural Language Processing	12
11-441/741	Machine Learning for Text Mining (Course is very mathematical, and is therefore appropriate only to students with such a preparation.)	9
15-104	Introduction to Computing for Creative Practice	10
15-110	Principles of Computing	10
15-112	Fundamentals of Programming and Computer Science	12
16-223	IDEATe Portal: Creative Kinetic Systems	10
16-385	Computer Vision	12
17-340	Green Computing	9
17-450	Crafting Software	12
17-562	Law of Computer Technology	9
18-090	Twisted Signals: Multimedia Processing for the Arts	10
36-202	Methods for Statistics & Data Science	9
36-204	Discovering the Data Universe	3
36-226	Introduction to Statistical Inference	9
36-311	Statistical Analysis of Networks	9
36-315	Statistical Graphics and Visualization	9
36-350	Statistical Computing	9
36-462	Special Topics: Methods of Statistical Learning	9
48-095	Spatial Concepts for Non-Architecture Majors	10
48-120	Digital Media I	6
51-229	Digital Photographic Imaging	9
53-451	Research Issues in Game Development: Designing for XR	12

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60/62-142	Digital Photography I	10
62-150	IDEATe Portal: Introduction to Media Synthesis and Analysis	10

List B: Two elective courses relevant to broad humanities expertise (at least 18 units):

76-210	Banned Books	9
76-245	Shakespeare: Tragedies & Histories	9
76-247	Shakespeare: Comedies and Romances	9
76-325	Intertextuality	9
76-339	Topics in Film and Media	9
76-373	Argument	9
76-476	Rhetoric of Science	9
79-175	Moneyball Nation: Data in American Life	9
79-200	Introduction to Historical Research & Writing	9
79-234	Technology and Society	9
80-180	Nature of Language	9
80-280	Linguistic Analysis	9
80-381	Meaning in Language	9
80-383	Language in Use	9
82-282	Interpreting Global Texts & Cultures	9
82-283	Language Diversity & Cultural Identity	9
82-383	Second Language Acquisition: Theories and Research	9
82-480	Translation Technologies	9

Note: Additional courses not on List A or List B may also be approved as electives; new courses are added every semester so please speak with Humanities Analytics advisor.