

HON 296-01, Fall 2015
Tues + Thurs 1:30-2:45 pm
Winston Hall 02

Interpretive Machines

This course invites first-year students into a historically ranging, critically intensive, and hands-on learning environment about the technologies by which humans transmit our cultural inheritance and ideas. “Interpretive Machines” takes a long view of how we got to now, from the history of manuscripts, books, and print media to the opportunities for innovation in the digital present. It argues that 1) then and now, our technologies for sharing text, image, and data crucially shape the ideas which they convey, and 2) these contexts can help students plan and execute new mechanisms for communication in the present. The course’s modules offer critical frameworks of background readings and discussions, a lab-like experience with the materials or skills involved, and applied projects for students to experiment with and study.

“Interpretive Machines” aims to reward students moving into a variety of disciplines and programs. The course seeks to marry the critical insights of the humanities with the design-and-build impulses of engineering, blending NC State’s “Think and Do” motto into a discovery experience for first-year students. The course also provides a framework for critical and creative thinking as part of NC State University’s QEP program called “TH!NK.” These standards and behaviors of critical + creative thinking, useful in every academic context, are built into the course’s program of activities, many of which are also designed to help you reflect on these very skills (i.e. metacognition). Students will become adept at using the intellectual standards for critical + creative thinking in evaluating the work of others as well as proposing, analyzing, and arguing research questions related to this course’s content.

This course has no prerequisites. It is restricted to first-semester freshmen in the University Honors Program (UHP) but open to other interested students with the UHP’s permission.

Objectives

The course’s goals are for students, having completed all course requirements, to:

1. be able to identify an array of historical and comparative contexts for media technologies;
2. accrue a concept inventory for understanding and analyzing various media and their communicative functions;
3. gain skills in working with varied media forms, from writing with quills to elementary physical computing, in order to generate critical projects; and
4. navigate the many resources at NC State for supporting such projects, including the NCSU Libraries, MakerSpaces, Circuit Studio, and so on.

Students leaving the course should have working analytical vocabulary and diverse introductory skill set for their continuing work as creative and critical makers at NC State and beyond. In addition, the course aims to deliver learning outcomes generalizable to all continuing courses of study. In accordance with the goals of the TH!NK program, students will, upon completion of this course, be able to:

1. explain the intellectual standards of creative + critical thinking;
2. evaluate the work of others using these standards;
3. apply critical + creative thinking skills and intellectual standards in the process of identifying and reckoning with research problems or projects; and
4. reflect on your own thinking and the thinking of others.

Finally, the course also satisfies the university's GEP requirement for Interdisciplinary Perspectives (IP). Each course in this category will provide instruction and guidance that help students to:

1. Distinguish between the distinct approaches of two or more disciplines.
 - a. Course outcome: identify and distinguish between approaches to historical and contemporary text technologies from disciplines including English and Engineering.
 - b. Means of assessment:
 - i. Students will research and apply critical readings from participating disciplines in their course projects.
 - ii. Students will assess historical and contemporary text technologies in class and write guided reflections in course journals.
2. Identify and apply authentic connections between two or more disciplines.
 - a. Course outcome: construct a concept inventory for analyzing various media and their communicative functions.
 - b. Means of assessment:
 - i. Each course assignment requires students to match an engineering development cycle to the structures of argument in project planning.
 - ii. All course assignments and journal entries are predicated on students' development and successful integration of analytic concepts.
3. 3. Explore and synthesize the approaches or views of the two or more disciplines.
 - a. Course outcome: Students will produce media forms according to a blended creative and critical approach.
 - b. Means of assessment:
 - i. Students will collaboratively construct projects which manifest principles of creative engineering and utilize diverse resources on campus to do so.
 - ii. Students will write reflection papers for each of the three major assignments and a final presentation, all of which depend upon successful argumentation and disciplinary synthesis.

Instructor

Paul Fyfe, Associate Professor of English

Office: 269 Tompkins Hall, Tues/Thurs 3-4p or by appointment

paul.fyfe@ncsu.edu

<http://go.ncsu.edu/pfyfe>

Honors Fellow

Priscilla Lunsford, BS candidate in Industrial and Systems Engineering

QAC Vice President of Programming, UHP Ambassador

palunsfo@ncsu.edu

Materials

The course requires the following:

1. Doyle, Arthur Conan. *The Adventures of Sherlock Holmes*. Dover Thrift Editions. (\$4.50) <http://store.doverpublications.com/0486474917.html> Please ONLY use this paperback edition. Not electronic. Paper. It's \$4.50. Seriously. (ISBN 9780486474915)
2. Amaranth Borsuk with Brad Bouse, *Between Page and Screen* (ISBN 978-0-9799562-8-7, buy from <http://www.sigliopress.com/books/bps.htm> and use code SPINTO for 25% discount)
3. Course journal: spiral bound notebook for regular writings and assignments.
4. Costs for NCSU Crafts Center workshop and NCSU Libraries MakerSpace materials

Many course readings will be linked electronically. Students should be prepared to print out these materials when necessary.

Requirements

1. Attendance. This course allows for three absences for any reason; no excuses necessary. Additional absences will cost 1/3 letter per infraction. I reserve the right to treat repeated lateness as an absence. We can probably accommodate conflicts with class time—professional, personal, etc.—but please talk with me in advance. The university's policy on Attendance Regulation (REG02.20.3) is available online <http://policies.ncsu.edu/regulation/reg-02-20-03>
2. Participation. Our class will be conducted as a seminar which will thrive on the participation of its members. Participation means thoughtfully preparing any reading materials, exploring study objects, and communicating with the seminar. It includes but is not limited to speaking up in class. While this is strongly encouraged, our course will provide multiple ways of participating in the topic and materials.

3. Fortitude. Because of its occasional engagement with technologies, this course may (ok, will) include some moments of frustration or even outright failure. These exercises may require your patience and fortitude in ways that other classes do not. It will also reward them. But never stew in isolation. If you get confused or stuck, let's talk. We'll figure it out together.
4. Course Journal. We will write during and/or after each class in a hard-copy course journal. You will make entries based on different assignments and submit the journals biweekly for evaluation.
5. Intellectual Standards Quiz (ISQ). The THINK program requires all student participants to complete a brief quiz on the standards of critical + creative thinking. No special preparation is required.
6. Critical skills scenario. The first of three course projects, this scenario presents you with a problem related to the course requiring your researched response.
7. Design fiction. The second project asks for a critically informed and creative proposal for an application. Students will submit advance proposals, conduct guided peer reviews, and developed an informed final version.
8. Critical making project. The final project requires students to creatively manipulate the codex technology into an experimental interface. Detailed instructions and workshops will help students develop and produce their ideas.
9. Class presentation. In lieu of a final exam, each student will submit their critical making project as well as an accompanying presentation to the class. In this short presentation, you'll explain your ideas, how they fit into our course's conversations, and where you see the conversation going next. These five-minute presentations will take a special form called "Pecha Kucha"—a highly visual style that will aid you in making effective presentations in the future. Further instructions to come.

Grading

Participation 20%

 In-class community

 Workshop participation

 Workshop projects

Course journal 10%

Skills scenario 20%

 Initial reflections

 Project worksheets with milestones

 Completed scenario

Design fiction 20%

- Project requirements sketch
- Project milestones
- First draft
- Peer review comments
- Final draft with reflection
- Critical making project 20%
- Initial proposal with needs assessment
- Project milestones
- Final projects
- Individual reflection of work
- Pecha Kucha presentation 10%

A+	97-100	C	73-76
A	93-96	C-	70-72
A-	90-92	D+	67-69
B+	87-89	D	63-66
B	83-86	D-	60-62
B-	80-82	F	≤ 59
C+	77-79	-	-

Student Accommodation

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see the [Academic Accommodations for Students with Disabilities Regulation \(REG02.20.01\)](#).

Additional Student Responsibilities

All students are responsible for reviewing the NCSU Policies, Regulations, and Rules (PRRs) which pertain to their course rights and responsibilities. These include: <http://policies.ncsu.edu/policy/pol-04-25-05> (Equal Opportunity and Non-Discrimination Policy Statement), <http://oied.ncsu.edu/oied/policies.php> (Office for Institutional Equity and Diversity), <http://policies.ncsu.edu/policy/pol-11-35-01> (Code of Student Conduct), and <http://policies.ncsu.edu/regulation/reg-02-50-03> (Grades and Grade Point Average).

Policy on Incompletes

As stated by the university grading policy, "An IN must not be used...as a substitute for an F when the student's performance in the course is deserving of failing. An IN is only appropriate when the student's record in the course is such that the successful completion of particular assignments, projects, or tests missed as a result of a documented serious event would enable that student to pass the course." In this class,

a grade of "IN" will only be given (1) in response to a written student request [e-mail is fine] submitted to the instructor before 4:00 on the last day of classes; (2) at the instructor's discretion; and (3) because of a serious interruption a student's work not caused by his/her own negligence. The university's policy on incompletes REG 02.50.03) can be found at <http://policies.ncsu.edu/regulation/reg-02-50-03>

Finding Help and Supporting Fellow Students in Distress

As members of the NC State Wolfpack community, we each share a personal responsibility to express concern for one another and to ensure that this classroom and the campus as a whole remains a safe environment for learning. Occasionally, you may come across a fellow classmate who seems in crisis or may need help. In these cases, consider reporting to NC State Students of Concern (<http://studentsofconcern.ncsu.edu/>). If you are needing help or just someone to talk to, please get in touch with the Counseling Center at Student Health (<http://healthcenter.ncsu.edu/counseling-center/>) which offers confidential services.

Anti-Discrimination Statement

NC State University provides equality of opportunity in education and employment for all students and employees. Accordingly, NC State affirms its commitment to maintain a work environment for all employees and an academic environment for all students that is free from all forms of discrimination. Discrimination based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is a violation of state and federal law and/or NC State University policy and will not be tolerated. Harassment of any person (either in the form of quid pro quo or creation of a hostile environment) based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation also is a violation of state and federal law and/or NC State University policy and will not be tolerated. Retaliation against any person who complains about discrimination is also prohibited. NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at http://www.ncsu.edu/policies/campus_environ or http://www.ncsu.edu/equal_op. Any person who feels that he or she has been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Equal Opportunity (OEO) at 515-3148.

Class Evaluations

Online class evaluations will be available for students to complete during the last two weeks of class. Students will receive an email message directing them to a website where they can login using their Unity ID and complete evaluations. All evaluations are confidential; instructors will never know how any one student responded to any question, and students will never know the ratings for any particular instructors.

- Evaluation website: <https://classeval.ncsu.edu>
- Student help desk: classeval@ncsu.edu

- More information about ClassEval:
<http://www2.acs.ncsu.edu/UPA/classeval/index.htm>

Course Schedule

Section 1: Media Assessment

Goals: Definitions, Examples, Critical Reasoning

Thurs Aug 20: Welcome and Overview

Homework (HW): Get necessary materials for course

Topics: Introduction to the course, THINK structure, media analysis

In class: Mystery machine analysis

Course journal: Introduction to “daily offices”

Tues Aug 25: Standards of Critical and Creative Thinking

HW: Read in advance

Fishwick, Paul. “Engineering the Humanities.” *Creative Automata* 29 Jan. 2015. Web. <http://creative-automata.com/2015/01/29/engineering-the-humanities/>

---. “Humanizing Engineering.” *Creative Automata* 1 Feb. 2015. Web. <http://creative-automata.com/2015/02/01/humanizing-engineering/>

Topics: Intellectual standards of creative and critical thinking

In class: SEE-I

Course journal: “Adopt-a-standard” assignment. In the next few days of your experiences at NC State or in our world, where and how well is your standard used or abused?

Thurs Aug 27: Thoughts on Paper

HW: “Adopt-a-standard” assignment.

Topics: metacognition, mediums and cognition

In class: Review **first assignment (skills scenario)** and record initial reflections on worksheet. Review metacognitive cycle for self-directed learning (with handout). Brainstorm list of things we need to address the problem.

Read and discuss Keim, Brandon. "Why the Smart Reading Device of the Future May Be ... Paper." *WIRED*, May 1, 2014.

<http://www.wired.com/2014/05/reading-on-screen-versus-paper/>

Course journal: "Media diet" assignment. For two days, keep careful track of all the media you consume: what devices or platforms, where this occurs, and for how long. Make a graph or visualization of your diet.

Tues Sept 1: Writing to Think

HW: Read in advance:

Konnikova, Maria. "What's Lost as Handwriting Fades." *The New York Times*, June 2, 2014. <http://www.nytimes.com/2014/06/03/science/whats-lost-as-handwriting-fades.html>

Mueller, Pam A., and Daniel M. Oppenheimer. "The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking." *Psychological Science* (2014): 1-10.
<http://pss.sagepub.com/content/early/2014/05/21/0956797614524581> [or PDF]

Topics: Writing and cognition

In class: Discussion of readings, quills and ink practice, create "artisanal tweets" and post on campus

Course journal: Reflect on tweet activity and strategies for its delivery

Thurs Sept 3: Reading without Thinking

HW: Read in advance

Bogost, Ian. "Reading to Have Read." *The Atlantic*, March 14, 2014.
<http://www.theatlantic.com/technology/archive/2014/03/reading-to-have-read/284391/>

Topics: debates about reading

In class: "Spritz" tests. Bring your laptop. Hand out **project plan and milestones worksheet**.

Course journal: Daily offices. **Submit journals for review**.

Tues Sept 8: Close Reading

HW: Read in advance: Doyle, Arthur Conan. "A Scandal in Bohemia" in *The Adventures of Sherlock Holmes* (1-20)

Topics: Close reading and interpretation

In class: Reflections and groups try interpretive reading worksheet

Course journal: Daily offices.

Thurs Sept 10: Meaning in the Margins

HW: Finish and submit **project plan**.

Topics: Marginalia

In class: Book Traces marginalia search in DH Hill Library

Course journal: Personal marginalia hunt. Document where you have added “traces” of your reading or presence.

Tues Sept 15: Electronic Reading

HW: Read in advance ON THE KINDLE: Doyle, “A Case of Identity” (n. pag.)

Topics: Remediation, platforms, e-readers

In class: eBook reviews and old book pitches

Course journal: Daily offices

Thurs Sept 17: Critical Reading

HW: *HW:* Finish and submit **project milestones worksheet**. Read in advance:

Fillingham, L.A. “The Colorless Skein of Life’: Threats to the Private Sphere in Conan Doyle’s A Study in Scarlet.” *ELH* 56.3 (Autumn 1989): 667-688.

<http://www.jstor.org/stable/2873202>

Topics: Methods and interpretation, the structures and standards of scholarly arguments

In class: Critical reading worksheet

Course journal: Daily offices. **Submit journals for review**.

Tues Sept 22: Close Listening

HW: Download and listen to the audiobook in advance: Holmes, “The Speckled Band”

Topics: Remediation, modalities, sound

In class: Reflections. Exploring different performances.

Course journal: Daily offices.

Thurs Sept 24: The Voice of the Text

HW: Record and submit an audio snippet of your own from any new story in *The Adventures of Sherlock Holmes*

Topics: Performance, embodiment

In class: Review snippets.

Course journal: Reflections on audio recording.

Tues Sept 29: Electronic Texts

HW: Skills scenario projects due. “Read” in advance:

Judd Morrissey, *The Jew’s Daughter* (2000) <http://www.thejewsdaughter.com/>

Jason Nelson, *Secret Technology* (choose some to explore)
<http://www.secrettechnology.com/>

Topics: Interactivity and deformance

In class: Groups “close reading” of a Nelson text, pilot for the group

Course journal: Daily offices.

Section 2: Information and Interpretive Systems

Goals: Experiential Learning, Creative Hacking

Thurs Oct 1: Rejected Applications

HW: Review intellectual standards of critical and creative thinking

Topics: Standards and social protocols.

In class: Intellectual standards quiz (ISQ), intro to second assignment: design fiction assignment workshop

Course journal: Daily offices. Submit journals for review.

Tues Oct 6: Social Reading

HW: Read, annotate, and converse on Genius.com social text of Doyle, “The Five Orange Pips”

Topics: Social reading, annotation, the wisdom of crowds, backchannels.

In class: Examine the requirements of successful information communities, what platforms facilitate them, and why. Introduction to memes.

Course journal: Create and submit a meme to course FB wall. Record reflections in journal.

Thurs Oct 8: NO CLASS / FALL BREAK

Tues Oct 13: Hacks

HW: Bring a laptop. Reach and record milestones on design fiction proposal.

Topics: Creative hacking, writing with computers.

In class: Review class memes. “Deform” a version of Nick Montfort, “Taroko Gorge”

http://nickm.com/poems/taroko_gorge_original.html

* Note: Mac users should download and install TextWrangler to edit the code

Course journal: Daily offices.

Thurs Oct 15: Breaking and Making

HW: Read in advance: Sample, Mark. “Notes towards a Deformed Humanities.” SAMPLEREAITY May 2, 2012. Web.

<http://www.samplerReality.com/2012/05/02/notes-towards-a-deformed-humanities/>

Bring in finished draft of design fiction proposal.

Topics: Mashups, hacking, breaking, deformation

In class: Exchange design fiction reviews and peer review guidelines. Survey and then make a Twitter bot, part 1. For reference: Whalen, Zach. “How to make a Twitter Bot with Google Spreadsheets (version 0.4).” ZachWhalen.net May 17, 2015. Web. <http://zachwhalen.net/posts/how-to-make-a-twitter-bot-with-google-spreadsheets-version-04>

Course journal: Daily offices: ideas for Twitter mashups. Submit journals for review.

Tues Oct 20: Breaking and Making

HW: Peer review of design fiction proposals.

Topics: Deformation, cont.

In class: Return design fiction peer reviews. Complete Twitter bots.

Course journal: Daily offices.

Thurs Oct 22: Information Spaces

HW: Revise design fiction proposal. Read in advance

McCullough, Malcolm. "Ambient." *Ambient Commons: Attention in the Age of Embodied Information*. Cambridge, MA: MIT, 2013. 7-24.

Topics: The future of libraries, ambient information, mobility

In class: Tour of the Hunt Library and the Virtual Paul's Cross Project

Course journal: Reflections: how do you use physical spaces in the libraries or on campus?

Tues Oct 27: Text Analysis 1

HW: Submit design fiction proposal and reflection of work.

Topics: Text analysis

In class: Workshop with guest, Dr. Henry Schaffer

Course journal: Daily offices: computational analysis.

Thurs Oct 29: Text Analysis 2

HW: Familiarize yourself with Voyant. Read in advance: Michel, Jean-Baptiste, et al. "Quantitative Analysis of Culture Using Millions of Digitized Books." *Science* 331, no. 6014 (January 14, 2011): 176-182.

Topics: Distant reading and quantitative studies of culture.

In class: Conduct and discuss text analysis experiments.

Course journal: Daily offices. Submit journals for review.

Section 3: Making New Media

Goals: Development, Production, and Communication

Tues Nov: 3: Making Old Media

HW: Read in advance

Levy, Michelle, and Thomas Mole. "Introduction." *The Broadview Reader in Book History*. Ontario, Canada: Broadview 2015. ix-xx.

Topics: Material cultures and the codex

In class: Book making and binding workshop #1 in Conservation Lab, DH Hill Library

Course journal: Daily offices.

Thurs Nov 5: Making Old Media, cont.

HW: Read in advance

Hancock, Charity et al. "Bibliocircuitry and the Design of the Alien Everyday."
Textual Cultures: Texts, Contexts, Interpretation 8.1 (2013): 72–100.

Topics: The codex, bindings, cont.

In class: Book making workshop #2 in DH Hill Library. Review third creative + critical assignment.

Course journal: Daily offices.

Tues Nov 10: Augmented Media

HW: Treat selected pages in your *Sherlock Holmes* paperback according to sample pages from Tom Philips *A Humument*. Bring to class your copy.

Topics: Augmented reality, interface, virtuality

In class: Construct Borsuk, *Between Page and Screen* from DIY kits. Examine "epistle" section on *BtwP&S* website

Course journal: Daily offices.

Thurs Nov 12: Augmented Media, cont.

HW: Read *Between Page and Screen*. Write and send an "epistle" for *Between Page and Screen*.

Topics: Platforms and expression

In class: Decode epistles.

Course journal: Daily offices. Submit journals for review.

Tues Nov 17: Intro to Critical Making

HW: Read in advance: Sayers, Jentery. "Making Things in the Digital Humanities." January 2012.

Topics: Critical making, introduction to making safely

In class: Orientation to the MakerSpace in DH Hill Library. Please note this orientation is *required* to certify you to work in this space.

Course journal: Daily offices.

Thurs Nov 19: Iterative Making, i.e. Screwing Around

HW: Submit speculations on a final project.

Topics: Laser cutting, circuits, physical computing

In class: Experiment and document in the MakerSpace in DH Hill Library.

Course journal: Daily offices.

Tues Nov 24: Project Lab (on your own)

HW: Proposal for a final project. Include needs assessment, role assignments, and project plan.

Topics: Interfaced books

In class: Independent lab time for final projects.

Course journal: Project documentation and reflection.

Thurs Nov 26: NO CLASS / THANKSGIVING

Tues Dec 1: Project Lab

HW: Milestone checklist for final project.

Topics: Pecha Kucha, Common Rubric

In class: Review expectations and formats for final project and presentations.

Course journal: Project documentation and reflection.

Thurs Dec 3: Presentation and Final Pre-Flights

HW: Milestone checklist for final project.

Topics: Reflective design in practice.

In class: Lab time for final projects in DH Hill MakerSpace.

Course journal: Project documentation and reflection. Submit journals for review.

Tues Dec 8, 1:00-4:00 pm: Final Presentations

HW: Submit final projects and process papers. Project demos and Pecha Kucha presentations.

Credits

No course takes shape in a vacuum. This one evolved from its predecessor, [HON 202: Reading Literature in the Digital Age](#). And both were inspired by the course structures, lesson plans, and creative teaching of several persons, including Kari Kraus (HDCC 208A: [Creative Futures](#), Fall 2011, University of Maryland), Brian Croxall (ENG 389:

[Introduction to Digital Humanities 3.0](#), Spring 2015, Emory University), Mark Sample (DIG 401: [Hacking, Remixing, and Design](#), Fall 2013, Davidson College), and Ryan Cordell (ENGL 3340: [Technologies of Text](#), Fall 2014, Northeastern University). The title of the course borrows from one taught by Jerry McGann (U Virginia).

This course also depends on the generosity of people at NC State, especially at the NCSU Libraries: Cindy Levine, Markus Wust, Eli Brown, Josh Boyer, Jamie Bradway, Robin Harper, Emily Schmidt, and Adam Rogers. Thanks also to Sue Carson, Aaron Stoller, and the NC State Honors program for its support.