Yale University

English 353 - Fall 2024

Room: LC 203

Time: T/Th 11:35-12:50

Professor Ben Glaser

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Office Hours: Th 1:30-3:30 (and by appt)

# Poetry and AI A cartoon character typewriter on a desk Description automatically generated

## Course Description

This course asks what literary study and especially poetics teaches us about the ongoing training, implementation, and dissemination of large language models. What can the history of poetry teach us about the form of AI text? Generative AI continues to transform writing across contexts and genres. What can its linguistic algorithms teach us about human-authored writing? What AI tools will serve literary analysis? No knowledge of machine learning, programming, or familiarity with AI tools is required. Student work will include traditional critical essays, creative projects, and/or the supported development of digital tools and projects.

## Course Goals

* Analyze poetics and poetic form from the perspective of Literary Study
  + Encounter core theories of poetry from the 20th and 21st century
* Expand humanistic inquiry with the assistance of digital tools (i.e. “Digital Humanities”)
* Gain literacy in the development and application of AI Large Language Models
  + Theorize LLMs as a model of language
* Develop a coding sample / implement existing programs for analyzing poetry

## Our Scaffold

We will be building up our skills and understanding along three trajectories. The studies poetry and poetic language via literary studies. The second explores how we can analyze poetry as a set of digital databases (i.e. fancy/encoded text files) using programs (existing and bespoke code). The third is a direct study of LLMs: how do we interact with them; how are they trained and developed; what kind of language are they; what can humanities inquiry do with them?

| **Literary theories of Poetry and Poetics** | **Digital Humanities approaches to poetry** | **Understanding AI’s “Poetics” / LLM structure** |
| --- | --- | --- |
| Core structures of poetic form and figurative language | Coding environments, existing projects | Prompt engineering / familiarization with LLMs/GenAI |
| Theories of poetic language and how we read it | Copy-paste simple analyses using AI code | Basic training and tuning |
| Post-structuralist and other recent theories of poetics (algorithmic and not) | Corpus analysis experiments, either using AI interface or code | Poetry analysis and generation; customGPTs and beyond |

## Key Resources and Course Texts

* [Google Drive](https://drive.google.com/drive/folders/1cvlZgNM6kJu4qjAlt_jCR0NfJSPo-mkf?usp=sharing) (request permission in class day one)
  + [Running list of Events](about:blank) (please add!)
  + [Google Classroom](https://classroom.google.com/c/NzAxMTMyNDMzMTI3) [class code: flpq2qj]
* PEPP (*Princeton Encyclopedia of Poetry and Poetics)*: [Yale Library Access](https://search.library.yale.edu/catalog/10964174) / [Ebsco access](https://web-p-ebscohost-com.yale.idm.oclc.org/ehost/detail/detail?vid=0&sid=89f035f9-b551-4d13-8888-bdb4e9429c3e%40redis&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=475073&db=nlebk)
  + Assigned entries are printed in our poetry anth0logy
* RR (*Rhyme’s Reason)*: [Yale Library Access](https://search.library.yale.edu/catalog/14599497) / [Ebsco Access](https://yale.idm.oclc.org/login?URL=https://search-ebscohost-com.yale.idm.oclc.org/login.aspx?direct=true&db=nlebk&AN=839102&site=ehost-live&scope=site&ebv=EB&ppid=pp_Cover)
* Poetry Anthology (I will print this, but you must check this for each class date to see what is due and always bring to class!)
* Ben Glaser and Meredith Martin, [“Prosody and Metre: Twentieth Century” (Oxford Bibliographies)](https://www.oxfordbibliographies.com/display/document/obo-9780199846719/obo-9780199846719-0172.xml?rskey=AJchuB&result=3&q=prosody#firstMatch) (Annotated references for a range of 20th century theories of poetic meter and poetics in general)
* All other readings available digitally in Google Drive or as a library resource / reserve: usually linked here on the syllabus!
* <https://ai.yale.edu/yales-ai-tools-and-resources> [collection of Yale resources, many free to use]

## AI Course Assistant

We’re extraordinarily fortunate to have Madeline Gupta, a senior in Morse College who focuses on community technology infrastructure and futurisms, assisting with this course. She will be helping with course and assignment design, in-class labs, and has time available to help you with your labs (including group labs), general coding and AI questions, and final projects. Everyone will meet independently with Madeline at least once in preparation for the final project. She is also available for technical help throughout the course. She can be reached by email at [madeline.gupta@yale.edu](mailto:madeline.gupta@yale.edu) for coding questions and is available to meet virtually or in person for more in-depth help. In weeks 10,11, and 12 Madeline will also hold fixed office hours (to be scheduled).A person sitting on a pile of laptops

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# Work in the Course

## Labs

The main engine of the course are our labs. These are intended to take about an hour, but that may vary based on your experience, and some may require additional trial and error or assistance from Madeline. They scale up in complexity as the semester progresses, building on previous work. Several labs have two parts: first, an exploration of an element of poetry using poems and theories of poetry, then interacting with or building a digital tool or AI to explore that element further. Some of the more complex labs (concerning enjambment and LLM training) will be group projects.

Evaluation of labs: completeness (1 point) and thoughtfulness (1-2 points). You will receive brief holistic feedback, and we urge you to indicate desired feedback at the bottom of your submission. Submission by [Email](mailto:ben.glaser@yale.edu) or Colab (see each assignment)

“PE”: Poetics Exercises (Creative / Analytic) 15%

“DHL”: Five Digital Humanities Labs 15%

“AIL”: Four AI-related labs (Final group lab is worth double) 15%

## In-class Discussion Guide

Once during the semester [[sign-up link](about:blank)], you will be responsible for orienting our discussion of a critical text (i.e. not poetry). You may refer to the poetry assigned for the day as well, but your main goal is to elucidate key points in a reading and raise questions. You should have at least two passages (Perhaps 3-5 sentences or a short text) selected to close read, and two questions prepared. Expect to spend 15-20 minutes of class on your discussion.

## AI/Poetry Events

At the start of class each day you will have a chance to report back on a relevant event concerning AI (Language / text), poetry, or the digital humanities. You must do this at least once, but more is wonderful!

## Final Projects

We will begin brainstorming and developing final projects after Fall Break. Following two classroom pitch sessions, you will meet with both Professor Glaser and Madeline to set your goals and determine what resources you will need. You may absolutely write a “traditional” paper of 12-15 pages, but there are many other options including code, customGPT development, and creative projects. All final projects will include at least 5 pages of writing, not including ##comments in code (but these do matter!).

## Grading Summary

Labs: 5 Poetics Exercises (Creative / Analytic) 15%

5 DH Labs 15%

4 AI Labs:   15%

Participation

In class discussion guide for one reading (15-20 minutes): 5%

Attend one poetry, DH, or AI (LLM) event and report back 5%

Group work outside class: 5%

General in class 5%

Total: 20%

Final Project (minimum 5 pages of writing + code)

Presentation: 5%

Meetings with Professor Glaser + Madeline Gupta 5% each

Final project: 20%

Total: 35%

## Schedule

| **Date** | **Topics +**  **Readings Due by class start[[1]](#footnote-0)** | **In-class DH / AI Labs** | **Labs / Exercises Due by class start** |
| --- | --- | --- | --- |
| Th, Aug 29 | Three poems: Frost, “The Road not Taken”; Dickinson, “Tell all the truth”; Diaz, [“My brother my wound”](https://www.poetryfoundation.org/poetrymagazine/poems/56832/my-brother-my-wound) | [Google Drive](https://drive.google.com/drive/folders/1cvlZgNM6kJu4qjAlt_jCR0NfJSPo-mkf?usp=sharing) and Google Colab; selected LLMs (GPT 4o, Claude…) |  |
| Tu, Sept 03 | *PEPP (4th edition)*: “**Diction”**; Empson, “All” in *Structure of Complex Words* pp. 101-104; *RR*: 51 (bottom) – 54 (top) | [Select discussion guides](https://docs.google.com/document/d/1kfaSklP_am3ayFkpcQui0MWTiTRMou_i34XowXI_R-4/edit) |  |
| Th, Sept 05 | Wordsworth, [excerpts from “Preface to Lyrical Ballads](https://mason.gmu.edu/~rnanian/Wordsworth-Preface.html)” | Python basics; submitting assignments in Colab | PE1: Diction |
| Tu, Sept 10 | Hart Crane, “General Aims and Theories” + “Letter to Harriet Monroe” [[Beinecke original](https://collections.library.yale.edu/catalog/32194648)]  *PEPP (4th edition)*: **Metaphor** |  | DHL1: Read a text file in colab-python |
| Th, Sept 12 | Ryan Heuser, “[Word Vectors in the 18th Century](https://dh2017.adho.org/abstracts/582/582.pdf)”  Optional: YDATA [colab notebook on Word Vectors](https://colab.research.google.com/drive/1tGrSqgTyE1heKZuWxifPi-lHvjfeBYdr?usp=sharing) | Colab-Python practice for DHL2 |  |
| Tu, Sept 17 | Brooks and Warren, “Introduction” (pp. 1-22) to *Understanding Poetry* 3rd ed. (1938, 1960) |  | DHL2: Code Tinkering |
| Th, Sept 19 | Gwern Branwen, “[Prompts as Programming](https://gwern.net/gpt-3#prompts-as-programming)” | AI Prompt Engineering |  |
| Tu, Sept 24 | Pope, from “Essay on Criticism” (in poetry anthology); Wimsatt, “One Relation of Rhyme to Reason,” 1944  *PEPP (4th edition)*: **Rhyme** |  | AIL1: Prompts |
| Th, Sept 26 | RR 13-17; Chakrabarty et al, “Help me write a poem” pp. 6848-50 (remainder optional) | Text-processing with python: corpora files (shakespeare.txt). |  |
| Tu, Oct 01 | Roman Jakobsen, “Closing Statement” | Stanzas, or why does ChatGPT love ABAB | PE2: **Rhyme** (part 1) |
| Th, Oct 03 | Empson, Chapter VIII of *Seven Types of Ambiguity* (1930) | Intro to CMUDICT |  |
| Tu, Oct 08 | Daniel Shore, from *Cyberformalism* |  | DHL3: **Diction** (part 2) |
| Th, Oct 10 |  | Building LLMs: Part 1 |  |
| Tu, Oct 15 | T.S. Eliot, “Vers Libre”; Ezra Pound, from “A Retrospect”; RR 3-11; Glaser, Non-technical Meter Guide  *PEPP (4th edition)*: **Meter** |  | AIL2: **Rhyme** (part 2) |
| FALL BREAK |  |  |  |
| Tu, Oct 22 | Wimsatt and Beardsley, “The Concept of Meter: An Exercise in Abstraction” | Final Project Brainstorming | PE3: **Meter** |
| Th, Oct 24 | Robin Sowards “A Brief Guide to Generative Metrics”; Simon Jarvis, “For a Poetics of Verse”[[2]](#footnote-1)  *PEPP (4th edition)*: **Blank Verse (English)** | Building LLMs: Part 2 (explore Fine Tuning) | Final Project Pitch #1 |
| Tu, Oct 29 | Ted Chiang, “[ChatGPT is a Fuzzy JPEG of the Web](https://www.newyorker.com/tech/annals-of-technology/chatgpt-is-a-blurry-jpeg-of-the-web)” | Final Project Pitch #1  Sample: [Word Masking](https://colab.research.google.com/drive/1hCk0pjPuh0kyYGGJW4L_VkCtkJ1BVKaQ?usp=sharing) | PE4: **Iambic Pentameter** in everyday text |
| Th, Oct 31 | Milton, [“Note on the Verse](https://www.poetryfoundation.org/articles/69378/introduction-to-paradise-lost)”; *RR*: 12-13 (top): find and mark the enjambments. *+* 47 (bottom) – 50 (middle)  *PEPP (4th edition)*: **Enjambment** | Poesy.py, cadences.py, <https://github.com/quadrismegistus> |  |
| Tu, Nov 05 | Seth Perlow, “AI is better at writing poems than you’d expect. But that’s fine” |  | AIL3: **IP** part 2 |
| Th, Nov 07 | Kenneth Goldsmith, [Why Conceptual Writing? Why Now?](https://www.analyticalpha.nl/alphalab-tools/sow-for-teachers/ubuweb/)  <https://www.ubu.com/concept/index.html> [read, then explore an essay / poem from the site] | Building LLMs: Part 3 | DHL4: Adapt useful code or format a poetry text object. (Optional group) |
| Tu, Nov 12 | Walsh et al., "[Does GPT have a poetic style](https://arxiv.org/abs/2410.15299v1)" [pdf in drive] | Final Project Pitch #2 |  |
| Th, Nov 14 | Jack Chen, “On Poems (System and Environment)” | AI: Fine Tuning; Training | PE5: **Enjambment** |
| Tu, Nov 19 | Gwern Branwen’s [Transformer Poetry](about:blank) + Critique by Michele Elam [click link below Maya Angelou poem; read pg 284-288] | CustomGPTs | DH5: Enjambment pt 2 (Group) |
| Th, Nov 21 | Meghan O’Gieblyn, “[Babel](https://www.nplusonemag.com/issue-40/essays/babel-4/)”; *I AM CODE* (intro + selected poems) | Presentations from Yale peers on LLM work in other languages / poetry |  |
| Thanksgiving |  |  |  |
| Tu, Dec 3 | Group Lab discussions + Final Presentations |  | AIL 4 (6 pts) |
| Th, Dec 5 | Final Presentations |  |  |
| Th, Dec 12 |  |  | Final Projects Due (11:59pm) |

**Course Expectations and Policies**

* **Participation**
  + Your foremost responsibility in this class is the careful preparation of reading assignments and labs in advance of class sessions.
  + Regular participation is expected, although I do not insist on you speaking in every class. The participation grade is holistic. It is based on your contributions across the course, and those contributions are not measured by a quantity of comments. Dominating class discussion, in fact, is poor participation. Sometimes silences in class (whether individual or collective) are productive.
  + For every classroom session in which we have a reading or other source material, please have in mind:
    - A substantial question about the reading that you would like to pose to the class
    - A quote you would like to analyze together

## **Attendance**: As a courtesy to your peers and instructor, please show up to class on time each day, having completed all of the assigned work for the class period and ready to contribute to discussion. *Absences*: Consistent lateness or lacking the day’s reading will result in a deduction from your final grade. If you have six or more unexcused absences in the course, you will receive a failing grade. Longer-term illness and other problems should be discussed with your residential dean and with me as they arise: I’m happy to help you make up work with advance notice.

* **Formatting guidelines** 
  + **for Written Work**: 12 point, Times New Roman font. Double-spaced, using 1-inch margins, left justified (ragged right). Citations may be MLA or Chicago format. In the document header please include page numbers, your name, and the date. Title your file with your last name and the assignment name. Save your progress regularly! **Note**: Students are responsible for keeping backup electronic copies of all work.
  + **for Code**: python code will be submitted in Google Colab, which allows you to both comment using traditional # marks or to insert text. We will establish best commenting practices. Assignments will indicate specific requirements for documentation. You may suggest alternate submission practices for the final project (jupyter notebooks, compiled programs, etc).
* **Late Work**: Labs must be completed on time to keep up with collective discussion. It is better to submit incomplete work for partial credit than to miss out on the conversation. \*\*If this happens, twice during the semester you can then meet with me or our course assistant to make up the remainder of the credit. Please contact me immediately if you are concerned about a late submission.
* **Electronics: We will be using our laptops consistently in this class, so please bring one every day. That said, we will have non-screen time.** Disability and media scholar Jonathan Sterne writes of “avoiding an atmosphere of “ambient computing” and “availability to apps and social media”: “the classroom should be a space of focused discussion, a place to come together” rather than “multitasking.”[[3]](#footnote-2) Toward that end, please use printed sources when they are provided (i.e. poetry and certain essays).
* **Academic Integrity**: You will be writing as a member of a community of thinkers and scholars, and it is imperative that you acknowledge and respect the work of other members of that community. That said, the ‘rules’ of academic citation are not second nature. I encourage you to err on the side of too much citation if you are not sure what to do when quoting or paraphrasing. If you are uncertain about how to acknowledge a paraphrased or quoted source, ask me or go to <http://ctl.yale.edu/writing/using-sources/understanding-and-avoiding-plagiarism>.
  + **AI Guidelines for Research and Written Work**: It is up to you to determine the value of large language models / generative AI in your research and writing. For this course, we’ll adapt the Poorvu center’s boilerplate AI policy: *Before collaborating with an AI chatbot on your work for this course, please request permission by sending me a note that describes (a) how you intend to use the tool and (b) how using it will enhance your learning. This includes AI research tools, such as elicit and poe, though they do not generally need to be cited. Any use of AI to complete the written portion of an assignment must be acknowledged in a citation that includes the prompt you submitted to the bot, the date of access, and the URL of the program.*Here is a guide for citing genAI: <https://style.mla.org/citing-generative-ai/>
  + **AI Code Policy:** whenever you use gemini or another AI tool to generate code, indicate this in a comment and include the prompt. Gemini will (quite helpfully) autocomplete some elements in colab: you do not need to cite these. The vast majority of credit in this class is not based on writing unique code but on doing interesting things with existing code. Cite copy-pasted code (i.e. from github or stackoverflow) in comments, but not imported / installed modules (that is self-explanatory, though it may be helpful to document your choices)
* **Accessibility**: I am committed to making our class welcoming, compliant, and safe. The spirit of equity means avoiding all barriers to access, including but not exclusively disabilities for which you may [formally request accommodation](https://rod.yale.edu/). You do not need an official accommodation to figure out what works for you in the context of this course. Are there aspects of this course that conflict with your access needs? Note that your needs may conflict with classmates or instructors needs, in which case we may need to negotiate access. If you do not feel comfortable speaking with me directly, [please contact student accessibility services](https://rod.yale.edu/)
* **Difficult Subject Matter**: While I will never, as an instructor, intentionally shock or traumatize, no one can fully predict the effect of materials. It is my hope that the classroom can be a container in which triggering material can be engaged, and toward that end I will give previews of the kinds of subject matter we will encounter.

It is our collective responsibility to discuss difficult materials, but I take it as my personal responsibility to address any discriminatory or harassing actions from a member of our classroom community. I do this not to police but to preserve a space in which everyone can participate. In the spirit of non-policing: we do not need to agree with each other, or the readings. We are however obligated to demonstrate an understanding of course material and, where appropriate, to articulate why we disagree.

All that said, if you are having difficulty dealing with discussion or a reading, you may either raise the issue or simply discretely leave class. Please send me a note after so that I know what happened. Please let me know as well if you’d like a third party to mediate and promote accountability with a fellow student, or with me.

1. Note: Poetry readings are not listed here; you must check our printed anthology for every class date. This saves you money! [↑](#footnote-ref-0)
2. For students interested in working more on metrics, I have a set of more advanced discussions of prosody and would be happy to meet separately, especially for final project development. [↑](#footnote-ref-1)
3. From Sterne, [“Critical Perspectives on Machine Listening,”](https://sterneworks.org/wp-content/uploads/2024/01/611-W24SoundAI4Jan.pdf?fbclid=IwAR2ibEqVd9NG6TZ0ld81kmaVM1FvmnfVkSi1qXr9_8oSxx1WeoS13W_U1Gk) (available at sterneworks.org) [↑](#footnote-ref-2)