

## Course Details

#### Name

Interstellar AI

#### Number

IDH3931

#### Term

Spring 2026

#### **Time and Location**

W | Period 6 | LIT 0119

#### Instructor

#### Zea Miller, PhD

Assistant Instructional Professor University Writing Program

#### **Contact**

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#### Office

University Writing Program 2215 Turlington Hall (352) 846-1138

#### Office Hours

T | Period 6 | TUR 2223E R | Periods 5-6 | TUR 2223E W | Periods 7-9 | TUR 2223E

#### **Required Materials**

Tractatus Logico-Philosophicus by Ludwig Wittgenstein Available on Project Gutenberg.

#### **Supplies and Fees**

None

## **Course Type**

(Un)Common Writes courses are 1-credit themed writing workshops taught by University Writing Program faculty. These courses allow students the opportunity to work 1:1 with experienced instructors while stretching their writing muscles, inspiring their creative side, and releasing their inner writer.

## **Course Description**

Beyond the end of writing, our probes and transmissions will transit the stars. The symbolic rhetorics of our messages at once indicate the significance of communicative priorities and serve to mark by absence what could have been different. In other words, our messages must prioritize content to such a degree that what is not sent could also be significant. What if we could send new versions? On the Pioneer probes, we sent plagues etched with signs. On the Voyager probes, we sent golden records with sights and sounds. Thus, as technology progresses, our messages develop in sophistication. What would we send in the age of artificial intelligence? By interpreting messages we have already sent, analyzing their formation and genre, reading their history, and recreating them, we will come to fully appreciate the elements of scientific semiosis to prepare for the course project: crafting content for an AI interface.

## **Course Objectives**

Upon completion of this course, a student should be able to establish conceptual (semiotic, semantic, and sonic) and theoretical (rhetorical, cognitive, and logical) parameters for interstellar messages, compose content thereunder, and evaluate compliance thereto individually, collaboratively, and with artificial intelligence.

## **SLOs**

## **Student Learning Objectives**

This course will realize the course objectives by and through the following framework.

#### Goals

- To understand how to craft content strategically, effectively, rhetorically, and semiotically
- To appreciate the history and evolution of interstellar communication
- To analyze the semiotic, semantic, and sonic elements of interstellar messages
- To explore the intersection of rhetoric, cognitive science, and logic in shaping interstellar communication
- To utilize AI resources for the creation of novel interstellar messages
- To develop collaborative communication and project management skills
- To strengthen writing, creative capacities, and adaptability

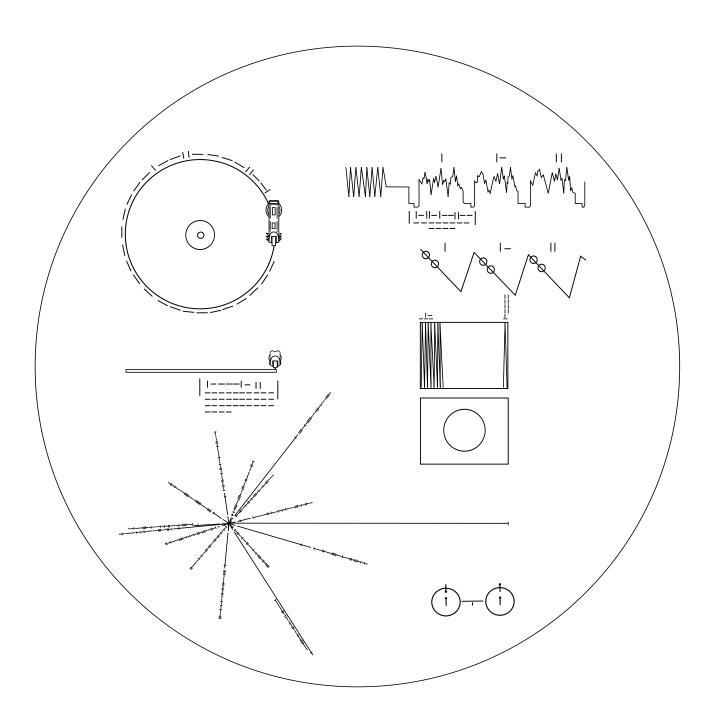
#### Means

- Analyzing and interpreting existing interstellar messages (e.g., Pioneer Plaque, Voyager Golden Record, Aricebo Message)
- Studying theory, including rhetoric, semiotics, cognitive science, and philosophy of language
- Exploring the latest AI platforms and services
- Engaging in peer editing, feedback, and collaborative brainstorming
- Utilizing AI platforms for ideation and content development
- Participating in group presentations and discussions
- Completing projects using critical, creative, and lateral thinking

#### **Outcomes**

By the end of this course, students will be able to demonstrate their understanding of the historical and conceptual frameworks used in interstellar communication, analyze and create examples of same, apply their knowledge of rhetoric, cognition, and logic to collaborate on a novel interstellar message with both peers and AI, and bolster their reasoning and writing skills by recording and justifying process, thereby preparing them for future work in their majors and careers.

# Assignments



## **Assignment Series**

## **Structure**

In this course, we will retrace how probes have carried evolving styles of messages into space. The major assignments mirror the approach of each era, beginning with plaque, moving to a record, and ending with what we might send today: an AI bot. Along the way, you will host and reply to discussion posts. At the end of the term, you will compose a reflection on your work and growth.

Class	Task	Words	Points
Major	Plaque	250	250
	Record	250	500
	Bot	2000	1000
Minor	Discussion Posts	250	50
	Course Reflection	250	50

## **Rubrics**

## **Standard Rubric**

Work submitted for grading will be assessed by how the deliverable measures against standard benchmark qualities for assessment as a range of ratings.

Rating	Exceptional	Excellent	Great	Good	Fair	Poor	Insufficient
Standard	Surpasses	Perfects	Meets	Mostly Meets	Meets Some	Barely Meets	Does Not Meet
Content Correctness, Completeness, Complexity, Evidence	Points x 1.07	Points x 1	Points x .97	Points x 0.87	Points x 0.77	Points x 0.67	Points x 0
Expression Clarity, Concision, Coherence, Citations, Style, Mechanics	Points x 1.07	Points x 1	Points x .97	Points x 0.87	Points x 0.77	Points x 0.67	Points x 0
Form Structure, Organization, Genre, References	Points x 1.07	Points x 1	Points x .97	Points x 0.87	Points x 0.77	Points x 0.67	Points x 0
Substance Argumentation, Effectiveness, Visuals	Points x 1.07	Points x 1	Points x .97	Points x 0.87	Points x 0.77	Points x 0.67	Points x 0

## Rubrics (cont.)

### **Pass/Fail Rubric**

Work submitted for pass/fail grading will be assessed by how the deliverable measures against benchmark qualities for assessment as binary ratings.

A minimum of 50% of the point total is required to earn a passing grade. Fields relayed under quality categories given are examples only. They will vary by the assignment.

Rating	Sufficient	Insufficient
Standard	Meets	Does Not Meet
Content Correctness, Completeness, Complexity, Evidence	Points x 1	Points x 0
Expression Clarity, Concision, Coherence, Citations, Style, Mechanics	Points x 1	Points x 0
Form Structure, Organization, Genre, References	Points x 1	Points x 0
Substance Argumentation, Effectiveness, Visuals	Points x 1	Points x 0

## **Grading Scale**

Please review the UF grade and grading policies.

A minimum grade of B is required to earn Academic points towards Honors Completion Requirements. Once you have earned your final grade in this course, please upload the course information and final grade from your Unofficial Transcript into your Honors Canvas Cohort: Honors Requirements module to earn Honors Milestone / Completion credit.

Grade	Percentage
A	94 – 100%
A-	90 – 93%
B+	87 – 89%
В	84 - 86%
B-	80 - 83%
C+	77 – 79%
С	74–76%
C-	70–73%
D+	67–69%
D	64–66%
D-	60-63%
Е	<60

## Assignment: Design a Plaque

## **Create a New Plaque**

Individual Assignment. 250 Words. 250 Points. Standard Rubric. *Use theory to create content*.

Inspired by the ideographs, ideograms, cultural semiosis, science, and etchings sent into space, you are tasked with creating a plaque that relays conceptual information and developing a guide to help someone understand it.

#### **Deliverables**

1 Image and 1 Document on Process.

## The Image

Create a plaque that encodes conceptual information.

Quality	Description
Composition	<b>Medium</b> Image File
Format	Ratio 16:9
Organization	<b>Structure</b> Design Conveys Information
Evidence	Conceptualization Information Mappable to Concepts
Style	Artistic Abstract and Conceptual

#### The Document

Craft a report that traces your process and guides a user through your image.

Quality	Description
Composition	<b>Medium</b> Typst
Format	<b>Code</b> Typst
Organization	Structure Ideation, Rationale, Creative Process, and an Interpretation Guide
Evidence	Logos Establish an argument for content development by and through reason, reasons, and reasoning
Style	Genre Memo
Length	<b>Word Count</b> 250, Minimum

## Assignment: Design a Record

## **Create a New Playlist**

Individual Assignment. 250 Words. 500 Points. Standard Rubric. *Use strategy to aggregate content*.

Inspired by the messages we have transmitted into space, you are tasked with either (1) creating a track listing that reflects eras and peoples across time and the planet and developing a document that traces your choices or (2) reflects an aspect of humanity through a theme.

#### **Deliverables**

1 Playlist and 1 Document on Process

### Option 1

### **Primary Categories**

Continents	Emotions	Times
Africa Asia Australia Europe North America South America	Happy Sad Exciting Relaxing Love Anger Lonely Hopeful	1600–1799: 2 1800s: 2 1900s–Today: 1 per Decade

### **Secondary Categories**

Genres	Narratives	Personal
5	5	5

### Option 2

#### Theme

Select up to 1 hour of songs that fully reflect the nature and contours of a theme.

## Record

Using a vendor of choice, please create a playlist that can be shared with the class.

Quality	Description
Composition	<b>Medium</b> Internet List
Format	<b>Playlist</b> Sharable Playlist from a Vendor
Organization	Structure Artist, Year, and Title
Style	Format Ordered by Category
Length	Song Count 1 per Category, Minimum

#### **Document**

Describe your approach to narrowing then determining your song choices. In other words, how did you generally begin, conduct, and end your search?

Quality	Description
Composition	<b>Medium</b> Typst
Format	<b>Code</b> Typst
Organization	Structure Categories as Headings and Subcategories as Subheadings with Overview
Style	Genre Memo
Length	Word Count 250 Words, Minimum

## Assignment: Design an AI Bot

### **Create a New Bot**

Individual Assignment. 2000 Words. 1000 Points. P/ F Rubric. *Use collaboration to create content with peers and AI*.

Over time, we have sent increasingly complex messages in various media available at the time. In the age of AI, might we send an AI chatbot? If so, how would we begin? You are tasked with starting the process as a team and with the help of AI.

#### **Deliverables**

1 Bot and 1 Document on the Content Developed

### **AI-Driven Bot**

As a class, you will encode information about Earth and science for a bot to interact with an intelligence.

Quality	Description
Composition	<b>Medium</b> Google Doc
Format	<b>Database</b> Topics and Content
Organization	<b>Structure</b> Conceptually Separate Segments
Style	<b>Voice</b> Scientific and Technical Language
Length	<b>Word Count</b> 2000 Words, Minimum

#### **Document**

Describe your approach to narrowing then determining your content choices. In other words, how did you narrow your topic and decide how to encode it?

Quality	Description
Composition	<b>Medium</b> Typst
Format	<b>Code</b> Typst
Organization	Structure Categories as Headings and Subcategories as Subheadings with Overview
Style	Genre Memo
Length	<b>Word Count</b> 250 Words, Minimum

## Minor Assignments

# Create and Reply to Discussion Posts

Individual Assignment. 250 Words. 50 Points. P/F Rubric. Stay current on developments in the AI, messages, and narratives.

At least once per term, each student will host a discussion for a topic related to the course. All students are required to host once and reply to all student-hosted first-level posts.

#### Deliverable

1 Post and Necessary Replies

### **Create a Course Reflection**

Individual Assignment. 250 Words. 50 Points. P/F Rubric. *Reflect on the journey taken in the course*.

Over the course of the term, you have learned about a considerable number of topics, from semiotics to AI. Reflect on your intellectual growth and journey. What will you take out of the course? How do you imagine that it might help you in the future? If applicable, what might you have done differently?

#### **Deliverable**

1 Document

#### **Posts**

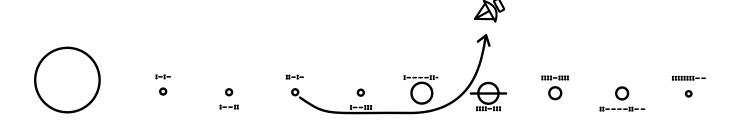
Introduce the class to an event or object related to the course. Discuss history, significance, and interpretation, where relevant.

Quality	Description
Composition	<b>Medium</b> Typst
Format	Genre Memo
Organization	Structure Memo Headings and Subheadings with Media
Style	<b>Voice</b> Academic Language
Length	<b>Word Count</b> 250 Words, Minimum

#### Reflections

Trace your growth as a critical and creative thinker over the term.

Quality	Description
Composition	<b>Medium</b> Typst
Format	<b>Code</b> Typst
Organization	Structure Memo Header with Content
Style	<b>Genre</b> Memo
Length	Word Count 250 Words, Minimum



### **Introduction to the Course**

Who are we? What is the nature of the course? What will we learn? What skills will we develop? What topic examples can be found in narratives?

## **Knowledge Development**

Communication, Narratives

## **Skill Development**

Networking

## **Required Readings**

- "The Failed Men" by Brian W. Aldiss
- <u>List of Interstellar Probes</u>
- <u>List of Interstellar Radio Messages</u>

## **Required Viewings**

- **Contact** by Zemeckis
- <u>"Darmok"</u>

Week	Activities	Assessments and Deliverables	Lectures and Discussions	Readings
1	Introductions	Read and Reply to Discussion Posts	Overview of Messages	Syllabus Watch <i>Contact</i>
2	Discuss Viewings	Read and Reply to Discussion Posts	Wittgenstein	Read the <i>Tractatus Logico-</i> <i>Philosophicus</i>
3	Discuss Readings	Read and Reply to Discussion Posts	Understanding	Finish the <i>Tractatus Logico-</i> <i>Philosophicus</i> Read "The Failed Men" by Brian W. Aldiss
4	Discuss Viewing	Read and Reply to Discussion Posts	Semantics and Semiotics	Watch "Darmok" from <i>STTNG</i> (episode 2 from season 5)

## Writing with and for AI

What are LLMs? How should we use AI? How can we make prompts? How can we improve prompts? What kinds of prompts are there?

## **Knowledge Development**

Large Language Models

## **Skill Development**

Prompt Design, Prompt Engineering

## **Required Readings**

• Google Vertex: <u>Introduction to Prompting</u>

• Google Cloud: <u>Prompt Engineering</u>

Week	Activities	Assessments and Deliverables	Lectures and Discussions	Readings
5	Create and Revise	Read and Reply to	Prompt Design and	Prompt Design and
	Prompts for AI	Discussion Posts	Engineering	Engineering

## **Plaques**

What messages have we physically sent into space? How are they meant to be interpreted? What can we learn from them? How can we recreate them today?

### **Knowledge Development**

Semantics, Semiotics, Rhetorical Theory, Categorization, Learning Models

## **Skill Development**

Creative, Critical, and Design Thinking

## **Required Readings**

- Pioneer Mission
- Pioneer 10
- Pioneer 11
- NASA: Plaque
- Wikipedia: Plaque
- Planetary Society: Plaque
- NASA. 1974. Jupiter Odyssey. YouTube.
- Purdue OWL: Visual Rhetoric
- Love, Bradley C. 2013. "Categorization." In *The Oxford Handbook of Cognitive Neuroscience: Volume 2: The Cutting Edges*, edited by Ochsner and Kosslyn, 342–358. Oxford: Oxford University Press.

Week	Activities	Assessments and Deliverables	Lectures and Discussions	Readings
6	Discuss Readings	Read and Reply to Discussion Posts	Semantics and Semiotics	Pioneer Readings
7	Create Content	Read and Reply to Discussion Posts	Rhetoric	Visual Rhetoric
8	Create Content	Plaque Due	Categorization	Categorization

### **Records**

What music have we sent into space? What do the selections say about us as a species? How do the songs reflect our complexity? What might we include today?

### **Knowledge Development**

World Music, The Development and Evolution of Music

## **Skill Development**

**Creative Thinking** 

## **Required Readings**

- Voyager Mission
- Voyager 1
- Voyager 2
- The Golden Record
- Overview
- Wikipedia: Golden Record
- Ives, Mike. 2024. "A Missy Elliott Song Travels to Venus at the Speed of Light." The New York Times, July 16, 2024, sec. Arts.
- Rolling Stone. 2024. "<u>The 500 Greatest Songs of All Time</u>." *Rolling Stone* (blog). February 16.

## **Required Viewings**

• Reynolds, Emer. 2017. *The Farthest*. PBS.

Week	Activities	Assessments and Deliverables	Lectures and Discussions	Readings
9	Discuss Recordings	Read and Reply to Discussion Posts	Voyager Record and Other Transmissions	Voyager Readings New York Times Reading Rolling Stone Reading
10	<b>No Class</b> Spring Break			
11	Listen to Selections	Playlist Due	N/A	N/A

### AI Bot

What capabilities can we program into a chatbot to represent humanity? What of our knowledge can be shared in a way that could be understood?

## **Knowledge Development**

Understanding

## **Skill Development**

Intents, Events, Prompting

## **Required Readings**

• "The Failed Men" by Brian W. Aldiss

## **Required Viewings**

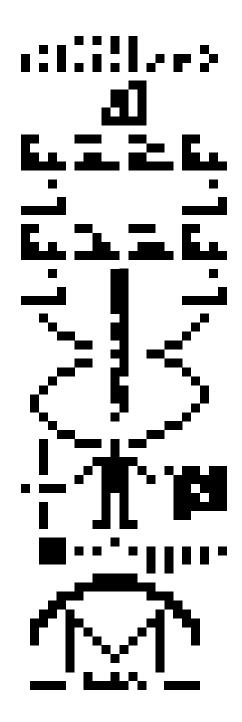
- A.I. Artificial Intelligence by Spielberg
- 2001: A Space Odyssey by Kubrick
- <u>Arrival</u> by Villeneuve

#### Structure

Module 5 will require considerable attention in and outside of class for content development.

Week	Activities	Assessments and Deliverables	Lectures and Discussions	Readings
12	Discuss Bots Register for Content	Read and Reply to Discussion Posts	Artificial Intelligence and Alien Intelligence	AI, 2001, and Arrival
13	Bot Content Development	Group Work		
14	Bot Content Development			
15	Test Bots	Bot Content Due	N/A	N/A

# **Policy Statements**



#### **Policies**

#### **Course Statements**

#### AI or Large Language Models

Required and Restricted. No overarching policy; instead, assignments will individually have parameters detailing if, when, and how to appropriately use AI as a resource during process-based work.

#### **Attendance**

Required. Standards for class attendance and makeup exams, assignments, and other work in this course are consistent with university policies for universitysponsored and supported reasons (e.g., athletics and band, illness, and religious holidays). Excused absences related to university-sponsored events must be discussed with the instructor prior to each event. At 6 unexcused absences, the course grade ceiling will be lowered to B+. Course failure is caused by 9 unexcused absences. Make-up work for excused absences should be discussed with the instructor.

#### **Tardiness**

If you miss more than 15 minutes of class, you will be marked absent for the day, unexcused, unless and until an acceptable excuse is provided at the end of class that day. While highly unlikely, if inauspicious circumstances delay my arrival by more than 15 minutes, in-class activities (not assignments, for which the due dates would remain in effect) for that day should be considered both canceled and rescheduled.

#### **Preparation**

Come prepared. On average, you will need to devote at least 3 hours per week for attendance and participation and 6 hours per week toward creating, reading, and research.

#### **Process and Storage**

All digital work must be crafted or composed and/or stored on a cloud-based service. This course will promote work as a process requiring drafts and revisions.

#### Grading

Assignments must be submitted as indicated on Canvas. Coursework will be graded by how closely it meets rubric-grounded criteria.

#### **Late Work**

Late work will be accepted within a 48-hour window without penalty. Afterward, work will be subject to a grade ceiling of B+. Reading quizzes must be completed within a 1-week window for credit. In harmony with the attendance policy, late work for excused absences should be discussed with the instructor and will not be subject to penalties.

#### Laptops, Cellphones, and Other Electronic Devices

Laptops are welcome in class for our work, note taking, and feedback (not entertainment or social media). Cellphones should always be silent and only used for necessary log in processes. However, please let the instructor know if you are expecting an urgent call or text. Students who misuse their electronics will first be asked to terminate their activities and, second, dismissed for the day, unexcused.

#### **Important Dates, Changes, and Readings**

Please review the course calendar on Canvas weekly. Deadlines are subject to beneficial postponement relative to our overall progress. Changes will be announced in class and on Canvas. Please consult the modules page in Canvas for required and recommended readings.

#### **General Disclaimer**

Owing to weather, local conditions, or situations, the instructor may adjust the schedule as necessary and will notify students via Canvas.

### **University Statements**

Please visit the webpage for UF Academic Policies and Resources.

#### **Honors Contact Information**

· Location: Honors Village Building 4

• Phone: 352-392-1519

• Email: advisor@honors.ufl.edu • Advising: Microsoft Bookings

· Calendar: Events