

UnCommon Read: Existential Physics
A Scientific Approach to the Meaning of Life, Free Will, and Consciousness
IDH 2930 (29901)
University of Florida Honors Program

Wednesdays, 4:05 - 4:55pm (Period 9)

Little Hall 0221

CREDIT: 1 Semester Hour

Instructors:

Dr. Kim Holton

Instructional Assistant Professor

Department of Health Education and Behavior

Office: FLG 125

Office Hours: Tuesdays 2 – 3:30pm via Zoom

Office Hours Zoom Link: [Join the waiting room](#) Meeting ID: 952 7394 6286 Passcode: connect

Email: Please use Canvas email to contact me for course-related correspondence.

Phone: (352) 294-2896

Audrey McAnally

Undergraduate Pre-medical Student

Office Hours: Fridays 9:00am-11:30am via zoom or by appointment

Meeting ID: 940 234 4215

Email: mcanallya@ufl.edu

Phone: (407) 792-8765

COURSE INFORMATION

Course Communications: Please send individual questions to us via the Inbox tool in Canvas. Do not use our personal ufl.edu email addresses for course correspondence in order to receive a response in a timely manner.

Required Texts:

- Hossenfelder, S. (2022). *Existential Physics: A Scientist's Guide to Life's Biggest Questions*. Viking. ISBN 978-1984879455
- Wallace, A. (2010). *Hidden Dimensions: The Unification of Physics and Consciousness*. Columbia University Press. ISBN 9788575961551

Course Objectives

1. Appreciate the connection between physics and philosophy through examination of novel research and perspectives from experts in the field
2. Evaluate philosophical arguments through critically assessing the logical coherence, validity, and soundness of arguments proposed in the book

3. Cultivate self-reflection and personal growth through assessing one's own beliefs about existential and ethical questions
4. Foster intellectual openness through class discussions

Course Description:

This course is based on the books *Existential Physics* by Sabine Hossenfelder and *Hidden Dimensions: The Unification of Physics and Consciousness* by Alan B. Wallace. These texts explore the intersection between spirituality and recent scientific discoveries with an emphasis on physics. While science and spirituality are often portrayed as mutually exclusive, Hossenfelder and Wallace present a perspective that allows science to enhance our understanding of spirituality and humanity as a whole.

The course will require a mature, open-minded perspective on various theoretical beliefs. Students must always remain respectful of other viewpoints and those with differing opinions to maintain an academic learning atmosphere. Course topics will encompass modern quantum physics, Buddhist philosophy, Einstein's theory of relativity, free will, death, and the impact of artificial intelligence on spirituality.

The class will be structured around weekly discussions of the books. Students will be evaluated based on class attendance/participation, weekly discussion questions, a midterm essay, and a final project.

I – Attendance and Participation: 30%

- You are expected to complete assigned readings and discussion questions due Tuesday at 11:59 pm prior to each class.
- Attendance and participation will be noted in each class. You may miss 1 class without penalty; each additional unexcused absence will incur a reduction of one letter grade.
- The course is a semester-long, student-centered conversation, facilitated by the Course Directors, about numerous topics covered in the books.

II - Assignments

- There will be one 4-page midterm paper (1000 word minimum) and one final project, each worth 35% (70% total).
- The paper and project are based on an integration of your reflections, understanding, and insights of our readings and classroom discussions.
- Both assignments must be uploaded to the Canvas course site by the due date.

Class Expectations:

1. Please plan accordingly and purchase both books *Existential Physics* by Sabine Hossenfelder and *Hidden Dimensions: The Unification of Physics and Consciousness* by Alan B. Wallace before the beginning of the semester. The books may be purchased new, used, or electronically.

2. Out of respect for each student's contributions to our discussions, we will give everyone our full attention. Please do not check your cell phone or computer during class time (unless you have purchased the books electronically).

COURSE POLICIES

Attendance Policy: We will meet weekly. Our time together will always require your active participation through discussions, presentations, and other learning activities. If you are unable to be physically present for class due to health reasons, you may join livestream via Zoom for extenuating circumstances. Please notify me before class if you are unable to attend. Given the dynamic nature of our class time together and the desire to create a safe and open container for reflection and exploration, class sessions will not be recorded.

Make-up Policy: While the midterm paper is due at 11:59pm on the date indicated in Canvas, the final project will be due before class time at 4:05 pm on the date indicated in Canvas. Do not wait until the last minute to attempt your submission in case of technical issues. If technical issues do arise with Canvas, you should ask for formal documentation from the UFIT Help Desk at the time of the issue. The documentation should be provided with your request for late submission.

Please read the following carefully

- Due to the interactive nature of class discussions, participation points cannot be made up.
- All other late work (the midterm paper and final project) is subject to a 10% deduction in grade for every day it is late.
- If an emergency arises which causes you to miss a deadline, it is your responsibility to contact the instructor within 24 hours and provide formal documentation via email within 72 hours so that you have an opportunity to make up for what was missed.
- Acceptable reasons for absences/missed deadlines as defined by university policies can be found on the [Attendance Policies page](#).

Course Technology: This course is facilitated in person and through Canvas. You may access Canvas from UF's e-Learning webpage: <http://elearning.ufl.edu/>.

Internet Access: UF students can access eduroam for free with their GatorLink log-in credentials. The eduroam network is fast and secure and has more than 10,000 wi-fi hotspots in 106 countries and territories worldwide.

How to connect to eduroam:

1. If you can get a Wi-Fi signal at any of the eduroam locations (see below) and your mobile device (laptop, smartphone, or tablet) has already been configured for eduroam, then you will automatically connect.
2. Otherwise, follow the instructions for connecting here: <https://helpdesk.ufl.edu/connecting-to-eduroam-off-campus/>.

There are more than 100 Wi-Fi hotspots in Florida, including several state university campuses and community colleges. Also, in Florida all of the UF/IFAS Research and Education Centers (REC) are equipped with eduroam, so if you live in a rural area of your county you can visit an REC to securely watch course videos and take care of your academic needs. Here's a link to all the eduroam sites in the U.S.: <https://incommon.org/eduroam/eduroam-u-s-locator-map/>.

If you have any problems connecting to eduroam you can call (352-392-HELP/4357) or email the UF Computing Help Desk.

Online Course Evaluation: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on

how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.”

GETTING HELP AND RESOURCES

For issues with technical difficulties for Canvas, please contact the UF Help Desk at <http://helpdesk.ufl.edu> or (352) 392-HELP (4357).

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from the Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

HEALTH AND WELLNESS RESOURCES:

- *U Matter, We Care*: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.
- *Counseling and Wellness Center*: [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.
- *Student Health Care Center*: Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).
- *University Police Department*: [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).
- *UF Health Shands Emergency Room / Trauma Center*: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).

ACADEMIC RESOURCES:

- *E-learning technical support*: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
- *Career Connections Center*: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- *Library Support*: Various ways to receive assistance with respect to using the libraries or finding resources.
- *Teaching Center*: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.
- *Writing Studio*: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- *Student Complaints On-Campus*: [Visit the Student Honor Code and Student Conduct Code webpage for more information](#).

Students with Disabilities:

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, dso.ufl.edu/drc) by providing appropriate documentation. Once registered,

students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

GRADING POLICIES

Grade Breakdown:

Assignment	Percentage
Attendance	10%
In-Class Participation	10%
Weekly Discussion Questions	10%
Mid-term Paper	35%
Final Project	35%

Attendance and In-Class Participation

Attendance and active participation will be noted each class for a total of 20% of the final grade. Students are allowed one absence (excused and unexcused) for full credit because we only meet once per week. Active participation is essential to create an interactive, stimulating academic environment.

Weekly Discussion Questions

Students are required to submit two potential discussion questions pertaining to the weekly reading material before Tuesday at 11:59 pm, ahead of our Wednesday class. These questions may involve confusion about topics covered in the reading or seek a deeper knowledge on specific subjects, with a particular emphasis on linking physics content to spiritual connotations. Additionally, students must upvote at least one post by another student that resonates with the material they wish to discuss in class, which ensures our discussions align with the interests of our group.

Mid-term Paper

Students will write a four-page double spaced paper (1000 word minimum) based on Sabine Hossenfelder's "Existential Physics" and topics discussed in class. More information will be available in class and on the Canvas assignment.

Final Project

Students will create a final project that can take various formats, including, but not limited to, a video, podcast, interactive website, or multimedia slideshow. The only prohibited option is a typical essay format. This project will delve into concepts discussed during the semester and must encompass topics from both books. Additionally, students are required to compose a two-page, double-spaced reflection (500 word minimum) explaining how their project relates to class topics and how this course has

impacted their spiritual and/or scientific beliefs. This final project will be presented in class on April 24. Further details will be provided in class and the Canvas assignment.

Course Grading Policies:

Information on current UF grading policies for assigning grade points:

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Please note that grades will not be rounded. In other words, if your final course grade is 89.99, you will receive an B+.

Percent	Grade	Grade Points
93.0 – 100.0	A	4.00
90.0 – 92.9	A-	3.67
87.0 – 89.9	B+	3.33
83.0 – 86.9	B	3.00
80.0 – 82.9	B-	2.67
77.0 – 79.9	C+	2.33
73.0 – 76.9	C	2.00
70.0 – 72.9	C-	1.67
67.0 – 69.9	D+	1.33
63.0 – 66.9	D	1.00
60.0 – 62.9	D-	0.67
0 – 59.9	E	0.00

COURSE SCHEDULE AND MAJOR ASSIGNMENTS

Begin Existential Physics by Sabine Hossenfelder

January 10 (class 1): Preface

January 17 (class 2): A Warning, and Chapter One: Does the Past Still Exist?, Chapter Two: How did the Universe Begin? How Will It End?

January 24 (class 3): Other Voices #1. Is Math All There Is?, Chapter Three: Why Doesn't Anyone Ever Get Younger?

January 31 (class 4): Chapter Four: Are You Just a Bag of Atoms?, Other Voices #2. Is Knowledge Predictable?

February 7 (class 5): Chapter Five: Do Copies of Us Exist?

February 14 (class 6): Chapter Six: Has Physics Ruled Out Free Will, Other Voices #3. Is Consciousness Computable?

February 21 (class 7): Chapter Seven: Was the Universe Made for Us?

February 28 (class 8): Chapter Eight: Does the Universe Think?, Other Voices #4. Can We Create a Universe?

March 6 (class 9): Chapter Nine: Are Humans Predictable?, Epilogue: What's The Purpose of Anything Anyway

Mid-term Paper: Due 11:59PM on March 8th, assigned on February 21st

Begin Hidden Dimensions: The Unification of Physics and Consciousness by Alan B. Wallace

March 20 (class 10): Chapter One: The Unnatural History of Science, Chapter 2: The Many Worlds of Naturalism

March 27 (class 11): Chapter Three: Toward a Natural Theory of Human Consciousness, Chapter Four: Observing the Space of the Mind

April 3 (class 12): Chapter Five: A Special Theory of Ontological Relativity, Chapter Six: High-Energy Experiments in Consciousness

April 10 (class 13): Chapter Seven: A General Theory of Ontological Relativity, Chapter Eight: Experiments in Quantum Consciousness

April 17 (class 14): Chapter Nine: Perfect Symmetry

April 24 (class 15): Final project presentations in class

Final Project: Due in class on April 24th, assigned on April 10th