

Spring 2025: University Honors Program UHON 351 Seminars

- One of the perks of being an Honors student is that you get to register early for classes.
- To take an Honors seminar, you must reserve a spot or join the waitlist during the **October 22 - 25 online reservation process**. Be on the lookout for details in the 411.
- **Early registration for all classes begins on Monday, October 28th**. Registration must be completed using Saluki-Net.
- Students must meet with their Honors mentor at least once prior to reserving or registering for an Honors seminar.
- To learn more about the seminars, meet the faculty teaching these seminars at the **Honors Faculty Roundtable, Monday, October 21st from 4-5:30 pm in the Honors Lounge**.

The Honors cluster theme this year is *Play and Civilization*. The courses in this cluster are **marked in red**.

351F- Fine Arts

| | | | |
|---|----------------|--------------|-----------------|
| Yoga and Sound Healing | M 1:00-3:30 | Altgeld 0116 | Johnson |
| Playing at Revolution | WF 11:00-12:15 | Morris 610A | Sramek |
| Historical Imagination and the Cinematic Experience | TR 5:00-6:30 | Virtual | Kapur and Ruckh |

351L- Human Health

| | | | |
|---|--------------|--------------|---------|
| Accelerating Expert Performance in Sports and Beyond | M 10:30-1:00 | Morris 610A | Fadde |
| Psychological Skills for Everyday Life | R 2:00-4:30 | Morris 610A | Lee |
| Yoga and Sound Healing | M 1:00-3:30 | Altgeld 0116 | Johnson |

351M-Multicultural

| | | | |
|---|---------------------|--------------|-----------------|
| Yoga and Sound Healing | M 1:00-3:30 | Altgeld 0116 | Johnson |
| Playing at Revolution | WF 11:00-12:15 | Morris 610A | Sramek |
| The Earth Around You | Spring Break & Prep | TBD | Conder |
| Historical Imagination and the Cinematic Experience | TR 5:00-6:30 | Virtual | Kapur and Ruckh |

351O-Social Science

| | | | |
|---|----------------|-------------|---------|
| Accelerating Expert Performance in Sports and Beyond | M 10:30-1:00 | Morris 610A | Fadde |
| Arithmetic en Route to the Cosmos | MW 4:00-5:15 | Morris 610A | Choiy |
| Generative AI: computing and Ethical Perspectives | TR 12:00-1:15 | Morris 610A | Imteaj |
| Pyrogeography: The History of Fire on Earth | TR 10:35-11:50 | Ag 170 | Ruffner |
| How Humans Learn: Science of Learning | MW 9:00-10:15 | Morris 610A | Martin |
| Playing at Revolution | WF 11:00-12:15 | Morris 610A | Sramek |
| Psychological Skills for Everyday Life | R 2:00-4:30 | Morris 610A | Lee |
| The Past, Present, and Future of Machine Learning | F 3:00-5:30 | Morris 722 | Xiao |

351S1-Science 1

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|---|---------------------|-------------|--------|
| Arithmetic en Route to the Cosmos | MW 4:00-5:15 | Morris 610A | Choiy |
| The Past, Present, and Future of Machine Learning | F 3:00-5:30 | Morris 722 | Xiao |
| Generative AI: computing and Ethical Perspectives | TR 12:00-1:15 | Morris 610A | Imteaj |
| The Earth Around You | Spring Break & Prep | TBD | Conder |

351S2-Science 2

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|---|----------------|--------|---------|
| Pyrogeography: The History of Fire on Earth | TR 10:35-11:50 | Ag 170 | Ruffner |
|---|----------------|--------|---------|

UHON 111

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|-------------------|-------------|-------------|----------|
| Honors Colloquium | T 2:00-4:30 | Morris 610A | Donoghue |
|-------------------|-------------|-------------|----------|

351U-Humanities

| | | | |
|---|----------------|--------------|-----------------|
| Arithmetic en Route to the Cosmos | MW 4:00-5:15 | Morris 610A | Choiy |
| Yoga and Sound Healing | M 1:00-3:30 | Altgeld 0116 | Johnson |
| Playing at Revolution | WF 11:00-12:15 | Morris 610A | Sramek |
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COURSE DESCRIPTIONS

Arithmetic en route to Cosmos: Beyond Infinity

The vastness of the cosmos bewilders us. Through human history, we have asked: Why is it the way it is? How did it all start? Where do we come from? And, what are we moving towards? The wonder of the cosmos has been expressed in our arts and in our sciences, in the mathematical patterns humans have sought in the universe, and in ways we have attempted to grasp infinity. This course invites students to see the ways in which arithmetic and physics have converged in the effort to understand our place in the cosmos. How have the various branches of mathematics such as Geometry, Algebra, and Topology held the key to solving the mystery of the cosmos?

- **Kwangho Choiy, Associate Professor, School of Mathematical and Statistical Science**
(Fulfills: Social Sciences/Science 1/Humanities /ask if it can substitute for UCC Math)

The Earth Around You

The Earth Around You is geology applied to living. We will examine how geologic processes and hazards influence human activities (and the reverse) and the geologic aspects of economics pollution, and waste disposal problems. The most effective way to learn about the Earth and its processes is to observe it first-hand. We will have the opportunity to discover and observe the geologic processes, structures, and treasures that shape the world around them through a study abroad opportunity in Costa Rica. The country lies on a subduction zone making it prone to earthquakes, volcanoes, and tsunamis. At the same time, the volcanic soils and topography ranging from the coast to the volcanic highlands, make for a diverse ecology and agriculture. For example, bananas and coffee grow in different climates of which Costa Rica has both. The diversity in eco-systems range from rain forest to cloud forest to desert to estuaries and coral reefs. The country is a leader in renewable energy - primarily hydropower, but the development of Lake Arenal for hydropower has come with its own environmental costs. Travel to Costa Rica will occur over Spring Break and we will be meeting before and after the travel to prepare, reflect on, and analyze. Time TBD based on the cohort. *Cost: app. \$3400.*

- **James Conder, Professor, Geology, School of Earth Systems and Sustainability**
(Fulfills: Multicultural/Science 1)

Accelerating Expert Performance in Sports and Beyond – New!

Whether it's a football quarterback finding an open receiver or a brain surgeon anticipating a cranial bleeding event, expert performers are able to make fast and accurate decisions that even they cannot explain. But what looks and feels (even to the performer) like instinct is actually pattern recognition that lets them see things that others don't.

What, exactly, do expert performers "see" differently? How did they get those skills? How can more performers get to expert levels more quickly? In our ever more complex world, we need expert performers more than ever.

The expert performers' advantage is not born-in talent, it is intuitive expertise built up through years of experience and 10,000 hours of deliberate practice. In this course, we dive deeply into decades of research on sports expertise and then apply it to other areas of performance, from law enforcement to classroom teaching.

(Dr. Fadde has patented software to train baseball and softball hitting consults with Major League Baseball teams.)

- **Peter Fadde, Professor of Organizational Learning, Innovation, and Development, School of Education**
(Fulfills: Health/Social Sciences/Humanities)

Generative AI: Computing and Ethical Perspectives – New!

This course explores the world of generative AI from two critical angles: the computing aspects of AI model generation and the ethical considerations surrounding its development and deployment. This course will empower students with a deep understanding of generative AI technologies, while equipping them with the ethical framework needed to navigate the evolving landscape of AI technologies responsibly.

The course will address the following questions:

- How do generative AI models work, and what are their real-world applications?
- How can we ensure that generative AI is used responsibly and ethically?
- When should Generative AI be utilized, and when should it be avoided?
- How can generative AI be tailored for positive impact, creativity, and innovation?

This course matters because it equips students with the knowledge and critical thinking skills to navigate the rapidly evolving landscape of generative AI and its ethical implications. Generative AI is shaping the future of various industries, and its ethical use is paramount to prevent misuse and harm. This course empowers students to become informed decision-makers, innovative creators, and responsible AI stewards. It enables them to contribute positively to society by promoting ethical AI development, fostering creativity and curiosity, and addressing the pressing questions surrounding AI's role in our world.

- **Ahmed Imteaj, Assistant Professor of Computer Science, College of Engr, Comp, Tech & Math**
(Fulfills: Social Science/Science 1)

Yoga and Sound Healing

This course provides introductions to both yoga and to the healing science of sound. While learning basic alignment principles and core poses and practices of yoga, students will experience first-hand yoga's health benefits and the healing effects of sound/vibration on brain and body. How can yoga and sound practices help foster clearer thinking, emotional equilibrium, a sense of peace and well-being, balance, flow, and ease in navigating your life? How can yoga and sound practices facilitate greater awareness, compassion, empathy, presence, and deeper interpersonal communication? How can practices of yoga and sound create safe spaces that nurture internal processes and a sense of feeling at home in your body while fostering a sense of community and belonging? This course challenges the student not only to think across disciplinary divides, but also to integrate the creative with the scholarly, the embodied practices of yoga and sound with the scientific principles, evidence-based research and time-honored wisdom behind them.

- **Maria Johnson, Associate Professor, School of Music, College of Arts and Media**
(Fulfills: Fine Arts, Human Health, Multicultural, or Humanities)

Historical Imagination and the Cinematic Experience – New!

Roland Barthes describes photographic cameras as "clocks for seeing." In turning the world and ourselves into images, we mark our existence in time; we cope with the knowledge, consciously or unconsciously, of our existence as historical creatures. In this co-taught class across the SIU system, we will go deep into understanding the relationship between the cinematic (understood as perception and experience) and historical consciousness. We will study the history of cinema but also learn to think historically through cinema. We will consider cinema as an archival, aesthetic, and perceptual phenomenon that has continued to evolve globally in response to its own history and the other arts; and wider historical, political, technological, and economic contexts. In particular, we will consider: How has cinema played with the limits of time and space in human experience? What does it mean when we say life feels like a movie? How does cinema construct and distort memory? Examples will be drawn from across the world.

- **Jyotsna Kapur, Professor, Cinema and Media Studies & Director University Honors Program, SIUC**
and Eric Ruckh, Associate Professor, History & Director University Honors Program, SIUE
(Fulfills: Fine Arts/Multicultural/Humanities)

Psychological Skills for Everyday Life

This seminar provides a unique opportunity for students to delve into the principles and practical applications of Cognitive Behavior Therapy (CBT) and apply them to their own lives. CBT is a widely recognized and evidence-based therapeutic approach that focuses on understanding how our thoughts, emotions, and behaviors are interconnected and influence our well-being. Throughout this course, students will gain a comprehensive understanding of CBT theory and techniques and learn how to utilize them to promote personal growth, enhance mental well-being, and overcome challenges. The course will emphasize self-reflection, self-awareness, and self-application as students explore various aspects of their own cognitive, emotional, and behavioral patterns.

- **Eric Lee, Assistant Professor, Psychology**
(Fulfills: Human Health or Social Science)

How Humans Learn: Science of Learning – New!

All students come to the classroom with specific ideas and preconceptions about teaching, learning, and studying, and with existing learning and study habits. However, rarely do students' ideas and habits align with what research shows us is most effective for developing new knowledge and skills. This class is an introduction to the "science of learning", a field of research based in cognitive science that investigates how humans learn and applies such research findings to real educational contexts. Students will leave this course with a foundational understanding of the cognitive and social dimensions of learning and teaching as well as best practices for learning, teaching, and studying. We will challenge common myths about learning and students will leave class with practical strategies that can be applied to improve their own learning. Students will also gain experience with reading and analyzing primary research (journal articles) in the science of learning and communicating science to a broader, non-expert audience.

- **Katherine Martin, Associate Professor of Languages and Linguistics, College of Liberal Arts**
(Fulfills: Social Science/Humanities)

Pyrogeography: The History of Fire on Earth

Pyrogeography is the study of the history of fire on planet Earth integrating plant and animal evolution, global ecologies, and human-social developments through time, leading into modern issues of climate change and loss of biodiversity. Students will be exposed to the extremely long history of fire here on Earth that has shaped ecosystems as well as fostered our own human development and evolution through reading current literature and discussing modern issues of firestorms through mixed media presentations and videos. While the study of fire has a long history, this new field is exciting and integrates so many fields of scientific inquiry that surely students will find the course engaging, timely, and expansive to their breadth of studies here at the University.

- **Charles Ruffner, Professor of Forestry, School of Forestry and Horticulture**
(Fulfills: Social Science/Science 2/Humanities)

Playing at Revolution – New!

Responding to the Honors cluster theme for 2024-2025 of "Play and Civilization: History, Theory, Practice," this course takes up the theme of revolution in the modern world through two full-length *Reacting to the Past* games, one on the French Revolution (which takes place in 1791-92) and another on the Mexican Revolution (which takes place between 1912 and 1920). *Reacting to the Past*, used at over 500 colleges and universities worldwide including in several major Honors programs, is an experiential learning method that combines deep critical analysis of primary texts with historical roleplaying. Students grapple with major works and ideological conflicts which shaped the world through playing actual historical character and advancing his or her character's ideas and goals through both cooperative and competitive gameplay. In the process, students not only learn about a historical event or major ideas far more deeply than in more "traditional" pedagogies but also appreciate more profoundly than in a lecture or classroom discussion the role of historical contingency in shaping what occurred. They also learn various intangible "soft skills" relating to public speaking, rigorous analysis of primary texts, and the arts of persuasion.

- **Joseph Sramek, Associate Professor of History and Philosophy, College of Liberal Arts**
(Fulfills: Fine Arts/Multicultural/Social Science/Humanities)

The Past, Present, and Future of Machine Learning – New!

This seminar will provide an overview of the history, current state, and possible future of machine learning. The seminar will cover the evolution of machine learning from its early days to its current state and explore the latest trends and developments in the field. Topics covered will include supervised and unsupervised learning, deep learning, neural networks, and more. The seminar will also examine the ethical implications of machine learning and its impact on society. By the end of the seminar, students will have a solid understanding of how to think about the past, present, and future of machine learning.

- **Mingqing Xiao, Professor Mathematical and Statistical Sciences**
(Fulfills: Social Science/Science 1)