Pre-College Summer Scholars
2019 Seminar Courses

Each section of this guide provides detailed information on each Seminar and includes the course theme, date, title, description, and instructor. We are proud to offer courses in the following topic areas:

STEM (Science, Technology, Engineering, Mathematics)
Psychology
Philosophy
Business and Leadership
Pre-Health and Wellness

Preparing people to lead extraordinary lives
Students may choose to live on campus in a designated residence hall with other Pre-College Summer Scholars participants. They will be asked to move in on the Sunday prior to the first day of class and are able to move-out on the Saturday following the conclusion of their class.

### Residential Student Fees

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>$550.00</td>
</tr>
<tr>
<td>Housing <em>shared room with other program participant (s)</em></td>
<td>$350.00</td>
</tr>
<tr>
<td>Dining <em>includes all meals</em></td>
<td>$195.00</td>
</tr>
<tr>
<td>Program Fee <em>to provide staffing, programs, and activities</em></td>
<td>$400.00</td>
</tr>
</tbody>
</table>

**TOTAL COST** $1,495.00

### Commuter Student Fees

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>$550.00</td>
</tr>
<tr>
<td>Dining <em>includes daily breakfast and lunch</em></td>
<td>$130.00</td>
</tr>
<tr>
<td>Program Fee <em>to provide staffing, programs, and activities</em></td>
<td>$315</td>
</tr>
</tbody>
</table>

**TOTAL COST** $995.00
Seminar A June 9–June 15

Business & Leadership
001 Moving Business Leaders Forward
Sherese Johnson
This course will explore several fields of business to determine which is right for high school students entering college. They will identify top paying professions, learn to network, speak with current business leaders and develop proper techniques for individual success.

STEM (Science, Technology, Engineering, & Mathematics)
002 Coding 101
Trisha Rogers
Web Technologies is an introductory course in web development, designed for beginners with an interest in building coding expertise. This course is the perfect entry point to coding, especially for high school students. The lectures are designed to be easily adapted to hands-on lab work. Students will learn how to code using HTML5 and CSS. Additionally, students will learn how to wireframe, create basic designs, create usable UX/UI and work with content.

Psychology
003 Are You the Next Bill Nye the Science Guy? Learn About Psychology and Design Your Own Research Study
Lauren Hindt
This course is designed to introduce students to the field of mental health and psychological research. Students will discuss what they think psychology is and learn about widely-accepted definitions. In addition, students will learn about different jobs one can obtain with a background in psychology (e.g., public health, nursing, medical sciences, child life specialists, non-profit organizations, teaching, business).
Business & Leadership

001 The Entrepreneurial Mindset: Create the Life You Want to Live
    Saya Hillman
This is not your traditional business class. Through investigating how an idea becomes a viable venture, the focus is on how to forge your own path using what you already possess, to embrace out of the box thinking and action, and to harness the power of yes. Sure, business plans, investors, and knowing what you’re doing are wonderful; sometimes they don’t happen yet success still can and does. This course approaches entrepreneurship as a lifestyle, a fundamental human instinct that we all possess and can and should unlock regardless of personal makeup and career choice. Students learn the characteristics of an entrepreneur and the various elements essential to developing and leading a successful entrepreneurial enterprise and existence, appropriate and applicable even for those who don’t choose self-employment or being a business owner.

Psychology

002 Psychology 101: A Beautiful Mind
    Jenny Phan
This course will introduce the basic concepts and methods of Psychology. This course will help explore topics such as: the scientific method, developmental psychology, mental health/mental illness, treatments for mental disorders, Psychology-related careers, and applying Psychology to the real world, to name a few. The course will include interactive activities, videos, as well as engaging discussions about how psychology impacts everyday behavior. An example schedule of topics is listed below.

STEM (Science, Technology, Engineering, & Mathematics)

003 Introduction to Data Science with R
    Ian Kahrilas
Data science has been named one of the best careers in America. One of its biggest obstacles is learning the right tool for the job. R is a free programming language specifically designed for data analysis and statistics. An active and enthusiastic user base is constantly expanding R’s functionality. Therefore, it is able to handle creation of high-quality data visualizations and interactive visualizations, app development, complex statistical analyses, and more. Simply put, R is a language designed for data science and beyond; learning R programming will also make students more competitive for a myriad of other careers in industry and academia. This course is intended to give students a basic foundation in R programming. While there will be a lecture component, students will gain hands-on experience with R during every class meeting with prepared exercises.

Students must bring their own laptops with macOS or windows operating systems.
Seminar C June 24 - June 29

Philosophy

001 The Mind-Body Problem  
*Jacob Andrews*

The relationship between the mind and the body is one of the most controversial issues in philosophy. In this class we will survey five positions on this issue. First, we will look at the two most popular positions in modern Western culture: Substance Dualism, for which body and mind are two distinct beings; and Physicalism, the position that there is no mind apart from the body. Next, we will look at the No Self position of the Buddha: selfhood and individual existence are illusions. Finally, we will survey two less popular but highly interesting positions on the question. Aquinas argues for Hylomorphic Dualism, in which body and mind are two distinct but related aspects of a single, integrated being. Thomas Nagel advocates for Neutral Monism, the view that all of reality is simultaneously both mental and physical, neither one more fundamental than the other. These last two views engage in fascinating ways with science: with biology and psychology in the case of Aquinas, and with physics and neuroscience in the case of Nagel.

Psychology

002 Understanding Psychology Through Creative Writing  
*Margaret Hawkins*

Students will delve into their imaginations and memories to write both fiction and nonfiction in response to prompts linked to principals of psychology. Brainstorming exercises will lead to short writing assignments, then to longer assignments, then to revision. Student writing will be read aloud and discussed. Relevant (and fun) homework will be assigned and students will keep a journal.

Pre-Health and Wellness

003 Introduction to Health Wellness and Nutrition  
*Samantha Wilson*

This course is designed to introduce students to the allied healthcare field, with an emphasis on exercise, physical activity and nutrition. The course will include an interactive lab experience and group activities, visual media, guest speakers from Health Wellness and Nutrition professional fields and a fieldtrip to a Nutrition Lab in Chicago.
Seminar D July 7- July 13

STEM

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Philosophy/Health

003 Medical Ethics— How to make the right choices in life and death situations

Randolph Carlson

This course will introduce students to the ethical concepts and frameworks that philosophers use to evaluate real medical situations from an ethical perspective. Students will also get practice with the tools that doctors, clinical ethicists, and hospital ethics boards use to determine what should be done in these situations. Along the way students will also sharpen their critical thinking skills—including argument analysis and critique—so they can better understand and articulate their own views on these issues.
Seminar E July 14 - July 20

Business & Leadership

001 The Entrepreneurial Mindset: Create the Life You Want to Live
Saya Hillman

This is not your traditional business class. Through investigating how an idea becomes a viable venture, the focus is on how to forge your own path using what you already possess, to embrace out of the box thinking and action, and to harness the power of yes. Sure, business plans, investors, and knowing what you’re doing are wonderful; sometimes they don’t happen yet success still can and does. This course approaches entrepreneurship as a lifestyle, a fundamental human instinct that we all possess and can and should unlock regardless of personal makeup and career choice. Students learn the characteristics of an entrepreneur and the various elements essential to developing and leading a successful entrepreneurial enterprise and existence, appropriate and applicable even for those who don’t choose self-employment or being a business owner.

STEM (Science, Technology, Engineering, & Mathematics)

002 Coding 201: Core Programming Concepts with JavaScript
Trisha Rogers

Core Programming Concepts with JavaScript is an intermediate course in web development, designed for high school students with a basic understanding of HTML5. The course will begin with a short refresher lecture on HTML5. No other coding/programming knowledge is required. This course will have a heavy emphasis on JavaScript as an entry point to programming: variables, logic, conditionals, loops, functions – all within the context of web development. The lectures are designed to be easily adapted to hands-on lab work. Students will learn how to code using HTML5 and JavaScript.

Psychology/Pre-Health and Wellness

003 Brilliant Mind: How Your Mind Can Learn Brilliantly
Jessica Kibblewhite

Shedding light on what is going on when we learn and dispelling common myths about the subject, this Summer Scholars’ psychology seminar Brilliant Mind: How Your Brain Can Learn Brilliantly will introduce high school students to this practical and fascinating behavioral science. In this seminar, students will enhance their own learning process and study the unique process of how the mind acquires new information and organizes preexisting knowledge throughout lifelong learning. In this seminar, we will explore and discuss research and experiments on the psychology of learning behaviors, as well as conducting our own studies and collecting data on our unique learning trends and needs. Students will use an essential question to focus understanding of their own unique learning process, asking "How would I react under these circumstances? What does this tell me about my own approach to learning?"
Seminar E July 14 - July 20

Pre-Health and Wellness

004 Research: “Huh” Science or Common Sense?

Annie Thomas

This course provides basic knowledge regarding research and the importance of evidence based clinical practice for health care professions. Students learn how evidence is generated through research for the prevention and treatment of diseases. Students also learn the importance of ethical principles for the protection of human subjects in research.
Philosophy
001 Faith, Reason and Modern Science

*Jacob Andrews*

In this course we will study the relationship between religious faith and modern science. In the first two days of class, we will look at the compatibility of faith and reason, examining the claims that religious belief is intrinsically irrational and that philosophy and science are dangerous to faith. In the last three days of class, we will look at the relationship between science and religion through the lens of three particular issues: evidence for and against the existence of God, the possibility of miracles, and the implications of neuroscience for religious belief.

Business & Leadership
002 Moving Business Leaders Forward

*Sherese Johnson*

This course will explore several fields of business to determine which is right for high school students entering college. They will identify top paying professions, learn to network, speak with current business leaders and develop proper techniques for individual success.
Seminar G July 28 - August 3

Philosophy

001 The Truth Behind Fake News

Alyson Paige Warren

In a “post-truth”, “post-fact” world, everyone with a social media account is one click away from being a reporter, disseminator, editor and/or curator of their own news, and - in many ways – their own truth. From viral clickbait videos to highly partisan echo chamber networks, #fakenews spreads faster and more easily than ever before – so how can we hope to keep up? In “Evaluating Ethos in a Fake News World”, we will explore, track and sift through various sources to discern satire from reality, and bombastic bluster from reputable bias. We will hold our sources and ourselves accountable for supporting our points of view thoughtfully and credibly, and for sharing information and opinion responsibly and ethically. We will learn how to consume our news feeds with a grain of salt, and how to develop our discerning pallets so that we may strive to be leaders in moving our own communities a little closer to fact than fiction.

Pre-Health and Wellness

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