



Global Online Academy Courses

Below are the GOA courses available to seniors for the 2019-2020 academic year.
Course descriptions follow on the next page.

Fall 2019 (Sept. 4 - Dec. 20, 2019)	Spring 2019 (Jan. 15 - May 1, 2020)
Bioethics	Bioethics
Global Health	Global Health
Introduction to Psychology	Introduction to Psychology
iOS App Design	iOS App Design
Medical Problem Solving I	Medical Problem Solving I
Positive Psychology	Positive Psychology
Social Psychology	Social Psychology
Applying Philosophy to Modern Global Issues	9/11 in a Global Context
Filmmaking	Abnormal Psychology
International Relations	Advocacy
Introduction to Legal Thinking	Climate Change & Global Inequality
Number Theory	Gender Studies
Problem Solving with Engineering & Design	Genocide & Human Rights
Race & Society	Neuropsychology
	Prisons & the Criminal Law

9/11 IN A GLOBAL CONTEXT: September 11, 2001 was a tragic day that changed the world in profound ways. In this course students explore the causes of 9/11, the events of the day itself, and its aftermath locally, nationally, and around the world. In place of a standard chronological framework, students instead view these events through a series of separate lenses. Each lens represents a different way to view the attacks and allows students to understand 9/11 as an event with complex and interrelated causes and outcomes. Using a variety of technologies and activities, students work individually and with peers to evaluate each lens. Students then analyze the post-9/11 period and explore how this event affected the U.S., the Middle East, and the wider world.

ABNORMAL PSYCHOLOGY: This course focuses on psychiatric disorders such as schizophrenia, eating disorders, anxiety disorders, substance abuse, and depression. As students examine these and other disorders, they learn about the symptoms, diagnoses, and treatments. Students also deepen their understanding of the social stigmas associated with mental illnesses.

ADVOCACY: This skills-based course explores the creativity, effort, and diversity of techniques required to change people's minds and motivate them to act. Students learn how to craft persuasive arguments in a variety of formats (e.g., written, oral, and multimedia) by developing a campaign for change around an issue about which they care deeply. We explore a number of relevant case studies and examples as we craft our campaigns. Units include persuasive writing, social media, public speaking, informational graphics, and more. The culminating project is a multimedia presentation delivered and recorded before a live audience.

APPLYING PHILOSOPHY TO MODERN GLOBAL ISSUES: This is an applied philosophy course that connects pressing contemporary issues with broad-range philosophical ideas and controversies, drawn from multiple traditions and many centuries. Students use ideas from influential philosophers to examine how thinkers have applied reason successfully, and unsuccessfully, to many social and political issues across the world. In addition to introducing students to the work of philosophers as diverse as Confucius, Immanuel Kant, John Rawls and Michel Foucault, this course also aims to be richly interdisciplinary, incorporating models and methods from diverse fields including history, journalism, literary criticism, and media studies. Students learn to develop their own philosophy and then apply it to the ideological debates which surround efforts to improve their local and global communities.

BIOETHICS: Ethics is the study of what one should do as an individual and as a member of society. In this course students evaluate ethical issues related to medicine and the life sciences. During the semester, students explore real-life ethical issues, including vaccination policies, organ transplantation, genetic testing, human experimentation, and animal research. Through reading, writing, and discussion, students learn basic concepts and skills in the field of bioethics, deepen their understanding of biological concepts, strengthen their critical-reasoning skills, and learn to engage in respectful dialogue with people whose views may differ from their own. In

addition to journal articles and position papers, students will be required to read Rebecca Skloot's *The Immortal Life of Henrietta Lacks*.

CLIMATE CHANGE AND GLOBAL INEQUALITY: Nowhere is the face of global inequality more obvious than in climate change, where stories of climate-driven tragedies and the populations hit hardest by these disasters surface in every news cycle. In this course students will interrogate the causes and effects of climate change, and the public policy debates surrounding it. In case studies, we will research global, regional, and local policies and practices along with the choices of decision makers and what they mean to the populations they serve. Who benefits, who suffers, and how might we change this equation? Following the Learning Studio model, in the second half of the course, students will work with their teacher to design their own independent projects reflecting their individual interests and passions. We will collaborate in workshops with classmates to deepen our collective understanding of the complex issues surrounding climate change. Throughout the semester we will also build and curate a library of resources and share findings in varied media, engaging as both consumers and activists to increase knowledge, challenge and advocate for sustainable norms. Finally, students will have the opportunity to reach a global audience by participating in GOA's Catalyst Conference in the spring 2019, as they present their individual projects to spark change in local communities through well-informed activism.

FILMMAKING: This course is for students interested in developing their skills as filmmakers and creative problem-solvers. It is also a forum for screening the work of their peers and providing constructive feedback for revisions and future projects, while helping develop critical thinking skills. The course works from a set of specific exercises based on self-directed research and culminates in a series of short experimental films that challenge students on both a technical and creative level. Throughout, we will increasingly focus on helping students express their personal outlooks and develop unique styles as filmmakers. We will review and reference short films online and discuss how students might find inspiration and apply what they find to their own works. *Prerequisite: Students must have access to an HD video camera, tripod or other stabilizing equipment, and editing software such as iMovie, Premiere Pro, etc.*

GENDER STUDIES: This course uses the concept of gender to examine a range of topics and disciplines that include feminism, gay and lesbian studies, women's studies, popular culture, and politics. Throughout the course students examine the intersection of gender with other social identifiers: class, race, sexual orientation, culture, and ethnicity. Students read about, write about, and discuss gender issues as they simultaneously reflect on the ways that gender has manifested in and influenced their lives.

GENOCIDE AND HUMAN RIGHTS: Students in this course study several of the major 20th century genocides (Armenian, the Holocaust, Cambodian, and Rwandan), analyze the role of the international community in responding to and preventing further genocide (with particular attention to the Nuremberg tribunals), and examine current human rights crises around the world. Students read primary and secondary sources, participate in both synchronous and

asynchronous discussions with classmates, write brief papers, read short novels, watch documentaries, and develop a human rights report card website about a nation of their choice.

GLOBAL HEALTH: What makes people sick? What social and political factors lead to the health disparities we see both within our own community and on a global scale? What are the biggest challenges in global health and how might they be met? Using an interdisciplinary approach to address these questions, this course improves students' health literacy through an examination of the most significant public-health challenges facing today's global population. Topics include the biology of infectious disease (specifically HIV and Malaria); the statistics and quantitative measures associated with health issues; the social determinants of health; and the role of organizations (public and private) in shaping the landscape of global health policy. Students use illness as a lens through which to examine social issues like poverty, gender, and race. Student work includes analytical and creative writing, research, peer collaboration, reading and discussions of nonfiction, and online presentations.

INTERNATIONAL RELATIONS: Are China and the U.S. on a collision course for war? Can the Israelis and Palestinians find a two-state solution in holy land? Will North Korea launch a nuclear weapon? Can India and Pakistan share the subcontinent in peace? These questions dominate global headlines and our daily news feeds. In this course, you will go beyond the soundbites and menacing headlines to explore the context, causes, and consequences of the most pressing global issues of our time. Through case studies, you will explore the dynamics of international relations and the complex interplay of war and peace, conflict and cooperation, and security and human rights. Working with classmates from around the world, you will also identify and model ways to prevent, mediate, and resolve some of the most pressing global conflicts.

INTRODUCTION TO LEGAL THINKING: Inspired by GOA's popular Medical Problem Solving series, this course uses a case-based approach to give students a practical look into the professional lives of lawyers and legal thinking. By studying and debating a series of real legal cases, students will sharpen their ability to think like lawyers who research, write and speak persuasively. The course will focus on problems that lawyers encounter in daily practice, and on the rules of professional conduct case law. In addition to practicing writing legal briefs, advising fictional clients and preparing opening and closing statements for trial, students will approach such questions as the law and equity, the concept of justice, jurisprudence and legal ethics.

INTRODUCTION TO PSYCHOLOGY: What does it mean to think like a psychologist? In Introduction to Psychology, students explore three central psychological perspectives – the behavioral, the cognitive, and the sociocultural – in order to develop a multi-faceted understanding of what thinking like a psychologist encompasses. The additional question of “How do psychologists put what they know into practice?” informs study of the research methods in psychology, the ethics surrounding them, and the application of those methods to practice. During the first five units of the course, students gather essential information that they apply during a group project on the unique characteristics of adolescent psychology. Students similarly envision a case study on depression, which enables application of understandings from

the first five units. The course concludes with a unit on positive psychology, which features current positive psychology research on living mentally healthy lives. Throughout the course, students collaborate on a variety of activities and assessments, which often enable learning about each other's unique perspectives while building their research and critical thinking skills in service of understanding the complex field of psychology.

iOS APP DESIGN: Learn how to design and build apps for the iPhone and iPad and prepare to publish them in the App Store. Students will work much like a small startup: collaborating as a team, sharing designs, and learning to communicate with each other throughout the course. Students will learn the valuable skills of creativity, collaboration, and communication as they create something amazing, challenging, and worthwhile. Coding experience is NOT required and does not play a significant role in this course. *Prerequisite: For this course, it is required that students have access to a computer running the most current Mac or Windows operating system. An iOS device that can run apps (iPod Touch, iPhone, or iPad) is also highly recommended.*

MEDICAL PROBLEM SOLVING I: In this course students collaboratively solve medical mystery cases, similar to the approach used in many medical schools. Students enhance their critical thinking skills as they examine data, draw conclusions, diagnose, and identify appropriate treatment for patients. Students use problem-solving techniques in order to understand and appreciate relevant medical/biological facts as they confront the principles and practices of medicine. Students explore anatomy and physiology pertaining to medical scenarios and gain an understanding of the disease process, demographics of disease, and pharmacology. Additional learning experiences include studying current issues in health and medicine, building a community-service action plan, interviewing a patient, and creating a new mystery case.

NEUROPSYCHOLOGY: Have you ever wondered how your brain determines all aspects of your behavior, emotion, learning and understanding each moment of the day? In Neuropsychology we will tackle this enormous question through our exploration of basic brain anatomy and function and the neurobiological perspective on cognitive and behavioral disorders. In addition, students investigate the neuropsychology of mindfulness, learning and memory along with how the brain and human behavior change over time. Students also pursue a citizen science project on mapping neurons to understand the nature and process of scientific research. The course culminates with students developing a fundraising campaign for a nonprofit foundation or research organization of their choosing, which supports research and/or patient care initiatives on a specific neurological condition. Student project topics have included everything from Alzheimer's disease to traumatic brain injury, addiction, synesthesia, and other areas of interest. We also focus on diagnostic and treatment challenges, including behavioral and pharmaceutical management.

NUMBER THEORY: Once thought of as the purest but least applicable part of mathematics, number theory is now by far the most commonly applied: every one of the millions of secure internet transmissions occurring each second is encrypted using ideas from number theory. This

course covers the fundamentals of this classical, elegant, yet supremely relevant subject. It provides a foundation for further study of number theory, but even more, it develops the skills of mathematical reasoning and proof in a concrete and intuitive way and is necessary preparation for any future course in upper-level college mathematics or theoretical computer science. We progressively develop the tools needed to understand the RSA algorithm, the most common encryption scheme used worldwide. Along the way we invent some encryption schemes of our own and discover how to play games using number theory. We also get a taste of the history of the subject, which involves the most famous mathematicians from antiquity to the present day, and we see parts of the story of Fermat's Last Theorem, a 350-year-old statement that was fully proven only twenty years ago. While most calculations will be simple enough to do by hand, we will sometimes use the computer to see how the fundamental ideas can be applied to the huge numbers needed for modern applications. Prerequisite: A strong background in precalculus and above, as well as a desire to do rigorous mathematics and proofs.

POSITIVE PSYCHOLOGY: What is a meaningful, happy, and fulfilling life? The focus of psychology has long been the study of human suffering, diagnosis, and pathology, but in recent years, however, positive psychologists have explored what's missing from the mental health equation, taking up research on topics such as love, creativity, humor, and mindfulness. In this course, we will dive into what positive psychology research tells us about the formula for a meaningful life, the ingredients of fulfilling relationships, and changes that occur in the brain when inspired by music, visual art, physical activity, and more. We will also seek out and lean on knowledge from positive psychology research and experts, such as Martin Seligman's Well Being Theory, Mihaly Csikszentmihalyi's idea of flow, and Angela Lee Duckworth's concept of grit. In exploring such theories and concepts, students will imagine and create real-world measurements using themselves and willing peers and family members as research subjects. As part of the learning studio format of the course, students will also imagine, research, design, and create projects that they will share with a larger community. Throughout the development of these projects, student will collaborate with each other and seek ways to make their work experiential and hands-on. Students will leave the class with not only some answers to the question of what makes life meaningful, happy, and fulfilling, but also the inspiration to continue responding to this question for many years to come.

PRISONS AND THE CRIMINAL LAW: Criminal courts in the United States have engaged in an extraordinary social experiment over the last 40 years: they have more than quintupled America's use of prisons and jails. Has this experiment with "mass incarceration" produced more negative effects than good? Is it possible at this point to reverse the experiment without doing even more harm? In this course, students become familiar with the legal rules and institutions that determine who goes to prison and for how long. Along the way, students gain a concrete, practical understanding of legal communication and reasoning while grappling with mass incarceration as a legal, ethical, and practical issue. In an effort to understand our current scheme of criminal punishments and to imagine potential changes in the system, we immerse ourselves in the different forms of rhetoric and persuasion that brought us to this place: we read and analyze the jury arguments, courtroom motions, news op-eds, and other forms of public

persuasion that lawyers and judges create in real-world criminal cases. Topics include the history and social functions of prisons; the definition of conduct that society will punish as a crime; the work of prosecutors, defense attorneys, and judges in criminal courts to resolve criminal charges through trials and plea bargains; the sentencing rules that determine what happens to people after a conviction; the alternatives to prison when selecting criminal punishments; and the advocacy strategies of groups hoping to change mass incarceration. The reading focuses on criminal justice in the United States, but the course materials also compare the levels of imprisonment used in justice systems around the world. Assignments will ask students to practice with legal reasoning and communication styles, focused on specialized audiences such as juries, trial judges, appellate judges, sentencing commissions, and legislatures. The work will involve legal research, written legal argumentation, peer collaboration, and oral advocacy. *Note: This course is offered through Wake Forest University School of Law and is designed by Ronald Wright, the Needham Y. Gulley Professor of Criminal Law. Prof. Wright is also part of the teaching team for this course. Students who take this course should expect a college-level workload (8-10 hours a week). Successful completion of this course will be rewarded with a certificate from the law school.*

PROBLEM SOLVING WITH ENGINEERING AND DESIGN: This course investigates various topics in science, technology, computer programming, engineering, and mathematics using a series of projects and problems that are both meaningful and relevant to the students' lives. Students will develop engineering skills, including design principles, modeling, and presentations, using a variety of computer hardware and software applications to complete assignments and projects. This is a course that focuses on practical applications of science and mathematics to solve real-world issues. Prototyping and project-based learning are therefore essential components of the course. Upon completing this course, students will have an understanding of the application of science and mathematics in engineering and will be able to make informed decisions concerning real-world problems. Furthermore, students will have worked on a design team to develop a product or system. Throughout the program, students step into the varied roles engineers play in our society, solve problems in their homes and communities, discover new career paths and possibilities, and develop engineering knowledge and skills. There are no particular math or science prerequisites for this course, just an interest in using STEM to solve problems and a desire to learn!

RACE & SOCIETY: What is race? Is it something we're born with? Is it an idea that society imposes on us? An identity we perform? A privilege we benefit from? Does our own culture's conception of race mirror those found in other parts of the world? These are just a few of the questions that students in this course will explore together as they approach the concept of race as a social construct that shapes and is shaped by societies and cultures in very real ways. Throughout the course, students will learn about the changing relationship between race and society across time and across cultures. Engaging with readings, films, and speakers from a variety of academic fields (history, sociology, anthropology, literature) students will explore, research, reflect on, and discuss the complex set of relationships governing race and society.

SOCIAL PSYCHOLOGY: Are you thinking and acting freely of your own accord or is what you think, feel, and do a result of influences by the people around you? Social psychology is the scientific study of how and why the actual, imagined, or implied presence of others influences our thoughts, feelings, and behavior. The principles of social psychology help explain everything from why we stop at stop signs when there is no one around to why we buy certain products, why in some situations we help others and in some we don't, and what leads to more dramatic (and catastrophic) events such as mass suicides or extreme prejudice and discrimination. As we take up these topics and questions, students will build and engage in a community of inquiry, aimed primarily at learning how to analyze human behavior through the lens of a social psychologist. Social Psychology invites students to explore, plan, investigate, experiment, and apply concepts of prejudice, persuasion, conformity, altruism, and the self that bring the "social" to psychology. The course culminates in a public exhibition of student-designed investigation of a social psychological topic of their choice. This course uses a competency-based learning approach in which students both build GOA core competencies that transcend the discipline and learn how to think like a social psychologist. Much of the course is self-paced; throughout the semester, students are assessed solely in relation to outcomes tied to the competencies.