Wizards of the Cinema: Special Effects in Film

From the earliest days of film, directors have used the medium to create magic. Whether it be Georges Méliès’s use of jump cuts to make people appear and disappear on camera, Ray Harrhausen’s use of stop-motion to bring iconic monsters such as King Kong to life, or Peter Jackson’s stunning recreation of Middle-Earth, filmmakers have a long history of using tricks in order to bring life to their fantastic worlds. In this course we will explore the history and evolution of special effects on film, looking at the earliest silent examples as well as recent films such as The Avengers and Pacific Rim. We will look at the original scenes and explore how filmmakers create such fantastic images on screen, and how these effects affect the viewer. We will also spend some time creating effects of our own, utilizing techniques that will include stop-motion, forced perspective, and jump cuts to create our own movie magic.

Personal Pod: A Glimpse into Architecture

Have you ever been fascinated with legos or wanted to learn about architecture and design? If so, this is the course for you as we explore, imagine, and create in a hands-on environment. Through the process of drawing and making models, you will gain a glimpse into the lives of both architects and landscape architects. More specifically, the actual project we will explore will be to design the personal pod or shelter of your dreams: a place where you would travel to both relax and rejuvenate. Initially we will brainstorm and develop the project by starting with your ideas of such a place. After that we will develop these ideas through diagrams and drawing. Finally, we will build a model of the finished design. While this may sound complex, don't be intimidated: no previous experience is necessary. We will all learn through the exciting process of drawing and making!

Russian Science Fiction in Real Life, or Could Your Brain Be Replaced with a Dog’s?

Mikhail Bulgakov’s 1925 novella Heart of a Dog replaces parts of a man’s nervous system with those of a dog – but did that really happen outside of the book? In this course we will explore why some scientists’ and authors’ dreams become reality, and why some remain works of fiction. We will also consider some of the differences between Russian and American science fiction, discovering what cultural factors lead different writers to invent different scenarios and gadgets. Along the way, we will imagine our own science-fiction creations and re-interpret those we’ve encountered, possibly answering the question: should these creations stay on the page, or could they be practically applied to modern life? No knowledge of Russian or science is required, but a willingness to believe – and create - the unbelievable is helpful!
Using Philosophy to Examine Ethical Problems: What Ought We To Do?

Suppose you are a trained lifeguard on your morning walk to work. You see that your neighbor, Tom, has fallen while painting his house and is dangerously injured. Although helping Tom would require getting paint on your new shoes, you could easily save him by performing CPR and calling 911. Most would agree that we have a moral duty to rescue Tom in this circumstance. Now assume that sending a $25 check in the mail to OXFAM would save a child in a third-world country by providing him with life-saving medicines. Do we have a moral duty to send the $25 check to save that child? If not, what is the relevant difference with Tom’s case? If so, must we also send a second, $100 check to save four additional children in need, rather than spending the $100 on new shoes? And, if so, when does our duty to send $25 checks end? In this course, we will use philosophy to examine these and other real-world ethical questions that we face in our personal and public life today. Classic philosophical positions will be presented in a lively, contemporary format using small group activities and intriguing hypothetical scenarios.

Exploring the Properties of Gases: Investigations in Chemistry

We are surrounded by gases, such as oxygen, nitrogen, and carbon dioxide. But do we really understand why gases behave the way they do? In this hands-on course, you will explore the physical and chemical properties of a variety of gases. You’ll learn about the kinetic-molecular theory, gas laws, intermolecular forces, and chemical reactions involving gases. You will apply your knowledge to solve challenging problems. If you work well "under pressure," then this course is for you!

Philosophy of Time, Space and Time Travel

Very often we find movies that deal with the issue of time traveling. Movie characters like Marty McFly, Agent J, Spock, and even Harry and Hermione are pictured going back (or forward) in time to solve mysteries or alter events. But, is time traveling an actual possibility according to modern science? And if not, does this mean that any time travel story is necessarily inconsistent? Is it possible to discriminate between good and bad time travel stories? In this class we are going to discuss these questions by considering three elements: the evolution of the scientific notion of time and space from Aristotle to our days; the evolution of the representation of time-travel in fiction; and current philosophical debates on the nature of time and space, and the possibility of time travel. With these elements in mind we are going to analyze famous time travel movies and see whether the time travel stories they present are consistent story-wise, and (if possible) scientifically accurate.