

The Invention of the Scientist Syllabus

Instructor

Anastasia Klimchynskaya

Quarter: Spring 2024

Start – end date: March 21 – May 16

Session day/time: Thursday, 6:00 pm – 8:30 pm

Course Code and Section: KNOW11028, 24S1

Email

aklimchynskaya@uchicago.edu

Modality

Remote learning

Course Overview

The nineteenth century saw the advent of the scientist as both a word and a concept. The “natural philosopher,” whose purview had for centuries been a *theoretical* understanding of the world, was replaced by a different kind of expert: the scientist (a word coined in 1834), whose expertise was practical and pertinent to a world being dramatically changed by technological developments and widely popularized scientific discoveries. This class explores how nineteenth-century writers, from Mary Shelley and Edgar Allan Poe to Jules Verne and Arthur Conan Doyle, engaged with this novel and exciting figure – an expert, an authority, an individual whose profession was science – and his role and responsibility in a social order being reconfigured by industrialization and the simultaneous professionalization and popularization of science. We will pair our literary explorations with non-fiction readings texts by scientists and science popularizers such as Humphry Davy, Claude Bernard, William Whewell, and Max Weber (“Science as Vocation”) as they meditated on their new roles. Additionally, we’ll consider how this literary genealogy influences both our fictional portrayal of science to this day as well as our perceptions of it – from our contemporary distrust of expertise to perennial fears about scientists “playing god,” a description as frequently applied to the fictional Frankenstein as the real-world Oppenheimer.

Required texts

Frankenstein, 1818 text – Mary Shelley ISBN 978-0143131847

From the Earth to the Moon - Jules Verne ISBN 978-1840226706

The Island of Doctor Moreau – H.G. Wells ISBN 978-0451468666

The Strange Case of Dr Jekyll and Mr Hyde – Robert Louis Stevenson
ISBN 978-0199536221

Jurassic Park – Michael Crichton ISBN 978-0345538987

All other readings will be made available digitally.

Books can be purchased online through the [University of Chicago Bookstore](#).

Course readings

Week	Topic	Reading Assignment
Week 1	Introduction	Discussion: what <i>is</i> a scientist? Marlowe, <i>Doctor Faustus</i> (excerpts, to be read in class) Francis Bacon, <i>The New Atlantis</i>
Week 2	The First “Scientists”	Mary Shelley, <i>Frankenstein</i> (1818) Humphry Davy, <i>A Discourse, Introductory to a course of Lectures on Chemistry</i> Anne K. Mellor, “Frankenstein: A Feminist Critique of Science” (1987) (optional)
Week 3	The Scientist and the Artist	Edgar Allan Poe, “The Facts in the Case of M Valdemar,” (1845) “A Sonnet to Science” (1829) Nathaniel Hawthorne, “Rappacini’s Daughter,” “Dr Heidegger’s Experiment” William Whewell, review of <i>On the Connexions of the Sciences</i> (1834)
Week 4	The Scientist and the Public	Jules Verne, <i>From the Earth to the Moon</i> (1865) Pierre-Jules Hetzel, Introduction to <i>Voyages Extraordinaires</i> Bernadette Bensaude-Vincent, “Putting Science Within the Reach of All”
Week 5	The Detective as Scientist	Edgar Allan Poe, “The Murders in the Rue Morgue” (1841) Arthur Conan Doyle: <i>A Study in Scarlet</i> , ch. 1-2 (1887), <i>The Sign of the Four</i> , ch. 1-2 (1890), “The Resident Patient” (1893) Adolphe Quetelet, “Introduction,” “The Determination of the Average Man in General”
Week 6	The Scientist of Human Nature	Robert Louis Stevenson, <i>The Strange Case of Dr. Jekyll and Mr. Hyde</i> (1886) Emile Zola, “The Experimental Novel” (1880), excerpts from <i>Germinal</i> Gina Lombroso Ferrero, “Introduction” (xi-xx) and “The Causes of Crime,” (125–152) in <i>Criminal Man According to the Classification of Cesare Lombroso</i>
Week 7	The Scientist and Materialism	H.G. Wells, <i>The Island of Dr. Moreau</i> (1896) Robert Tyndall, “The Belfast Address” (1874)

Week	Topic	Reading Assignment
Week 8	The Scientist Today	Michael Crichton, <i>Jurassic Park</i> (1990) Anne K. Mellor, “Frankenstein: A Feminist Critique of Science” (1987)

Accessing remote courses

Remote courses are taught through our Canvas platform. Approximately two weeks before your class begins, we will add you to your canvas site using the email address you provided at the time of registration. An invitation will then be sent to that email. Click the “Get Started” button in the email to begin the Canvas login process. For step-by-step instructions, please visit <https://grahamschool.uchicago.edu/academic-programs/online/learning-resources/liberal-arts>. Once you’ve created your Canvas account, you can access any Graham School canvas course for which you are registered at: <https://canvas.uchicago.edu>.

Accessibility information

Student Disability Services (SDS) works to provide resources, support and accommodations for all students with disabilities and works to remove physical and attitudinal barriers, which may prevent their full participation in the University community. Students that would like to request accommodations should contact SDS in advance of the first class session at 773.702.6000 or disabilities@uchicago.edu.

UChicago CARES Statement:

The University and its faculty are committed to creating a safer and more inclusive learning environment for all students. At the University, all faculty, staff, graduate student instructors, and teaching assistants are considered “Individuals with Reporting Responsibilities” and are required to let the University’s Title IX Coordinator know about any disclosures they receive from students about experiences of sexual misconduct (including sexual assault, dating violence, domestic violence, stalking, and sexual harassment). This includes disclosures of experiences that happened before their time at the University. This is to ensure that all students who have experienced sexual misconduct receive support, options, and information about their rights and resources. Students are not obligated to respond to this outreach, and this will not generate a report to law enforcement.

For more information, please see [this handout for students](#) as well as the [University’s Policy on Harassment, Discrimination and Sexual Misconduct](#) and [Policy on Title IX Sexual Harassment](#). You can also reach out directly for services and support from the [Office for Sexual Misconduct Prevention and Support](#) by emailing titleix@uchicago.edu.

If you, or another student you know, wishes to speak to a confidential resource who does not have this reporting responsibility, please contact the Sexual Assault Dean on Call through the UChicago Safe App or at 773.834-HELP.

Questions? Contact Zoë Eisenman at zmel@uchicago.edu.