Family Weekend 2019 Model Classes

Saturday, October 26, 2019

Model Classes are designed to introduce family members to our faculty, as well as their research and methods of teaching. Classes will be seated on a first-come, first-served basis until maximum capacity is reached. Please note that classes are subject to change.

Session 1: 9:30AM-10:30AM

Arabic Language & Culture; Novice Level
Osama abu-Eledam, Department of Near Eastern Languages & Civilizations
Rosenwald Hall, Room 11, 1101-11 E 58th St (60 seats)
The session will provide visitors with basic facts pertaining to Arabic language and culture. The Arabic script and the sound system of the alphabet will be introduced. Attendees will be able to learn a few expressions in Arabic (greetings and leave taking). Additionally, the session will focus on the Arab American population in Chicago and in the USA.

A Royal Gift Deciphered?
Theo van den Hout, Department of Near Eastern Languages & Civilizations and the Oriental Institute
Kent Chemical Laboratory, Room 101, 1020-24 E 58th St (50 seats)
Found in illicit excavations in Turkey, a silver drinking vessel in the form of a stag, has always remained something of a mystery. It is one of the top pieces of Hittite art at the Metropolitan Museum in NYC. A new reading of the inscription on it may offer us some context as to its original function.

Generating Sudoku
Stuart Kurtz, Department of Computer Science
Stuart Hall, Room 104, 5835 S Greenwood Ave (60 seats)
If you like solving puzzles, you know about Sudoku. You probably have worked out your own strategies for solving them. But have you ever wondered how Sudoku puzzles are created? This class will show you how.

Introduction to Data Science
Dan Nicolae, Department of Statistics
Stuart Hall, Room 102, 5835 S Greenwood Ave (60 seats)
Data science provides tools for gaining insight into specific problems using data, through computation, statistics, and visualization. This is a lecture based on materials from the Introduction to Data Science course, illustrating how a real-world problem can be approached through statistical and computational reasoning.
Looting in Modern European History  
*Alice Goff, Department of History*  
**Cobb Hall, Room 403, 5811 S. Ellis Ave (30 seats)**  
This class will explore contemporary debates about looted and displaced works of art in European museums. We will look at the stakes of these debates for both people and objects, and ask what the history of looting can tell us about these conflicts today.

Matter, Energy, Space, and Time: Fermi Problems  
*Erik Shirokoff, Department of Astronomy & Astrophysics*  
**Harper Memorial Library, Room 140, 1116 E 59th St (92 seats)**  
Fermi problems and quantitative ways of knowing: it's astonishing how much you know without knowing it! We'll explore some fun examples of how systematic, quantitative analyses and error estimates can be useful both in everyday life and in building an intellectual toolkit vital to understanding recent discoveries in astronomy.

Molecules that Changed the World  
*Scott Snyder, Department of Chemistry*  
**Kent Chemical Laboratory, Room 120, 1020-24 E 58th St (174 seats)**  
This class will explore organic molecules isolated from nature that have started wars, extended human life, and dramatically changed the mores of modern society. From penicillin, to capsaicin, to quinine, to progesterone, to Taxol, numerous examples of how organic molecules, and organic chemists, can impact the practice of modern life will be provided.

Political Correctness in the Classroom: A Case Study  
*Larry McEnerney, Collegiate Humanities Division*  
**Social Sciences Building, Room 122, 1126 E 59th St (150 seats)**  
Trigger warnings vs. free inquiry. Classrooms as safe spaces vs. classrooms as sites for the open exchange of views. The University of Chicago has been prominent in championing a commitment to academic freedom—a commitment that has drawn loud praise and fierce criticism. Indeed, the University’s institutional position is deeply controversial right here on campus. In this session, we'll look at this often theoretical debate through the lens of a concrete instance: a class where trigger warnings are given, where students are given the choice to opt-out of assigned readings, and where the very notion of the open exchange of views is itself challenged.

Tag, You’re It. Maybe.  
*Allen R. Sanderson, Department of Economics*  
**Saieh Hall for Economics, Room 021, 1160 E. 58th Street (92 seats)**  
Whether it be taxing cigarettes, gasoline, bottled water, sugary drinks, income, or imposing tariffs on goods coming in from China, who actually ends up paying the tab will not be determined by a presidential tweet, an act of Congress or the intentions of city hall or statehouse bureaucrats, but by economics. In our hour together we will examine a few contemporary examples of this intersection of the politics and economics of taxation.
Teaching Portuguese and Spanish to Heritage Language Learners
Ana Maria Lima and Lidwina van den Hout-Huijben, Department of Romance Languages & Literatures Cobb Hall, Room 409, 5811 S. Ellis Ave (31 seats)
This class is an overview of how Portuguese and Spanish for Intermediate or heritage language learners can be taught relying solely on authentic materials readily found on the internet. Weekly thematic modules help the student improve their language skills on all fronts and are designed from informal, mostly communicative (email), to formal and well-structured (academic essays).

Teaching ‘Self, Culture, and Society’ in the 21st Century
John Kelly, Department of Anthropology
Saieh Hall for Economics, Room 203, 1160 E. 58th Street (48 seats)
This class will explain the challenges of sustaining one of the largest and the longest running courses in the U of C core. How do we make the course more global and otherwise connect it to the twenty-first century, while also being true to its commitment to teach the greatest social theory? Introducing newly adopted readings by ibn Khaldun and Olympe de Gouges, Kelly will both explain the current overall structure of the sequence’s syllabus, and engage in a model discussion of what we learn by beginning not with Adam Smith’s political economy but ibn Khaldun’s, from the fourteenth century Maghreb, and what we learn by asking Olympe de Gouges (killed by guillotine) as well as Jean-Jacques Rousseau about the meaning of the French revolution.

The Diversity and Demographics of Distant Rocky Worlds
Leslie Rogers, Department of Astronomy & Astrophysics
Stuart Hall, Room 105, 5835 S. Greenwood Avenue (75 seats)
The discovery of exoplanets (planets outside the Solar System) has brought the settings of many science fiction stories within reach of scientific inquiry. Astronomers’ ever increasing sensitivity to smaller and smaller planets has opened the opportunity for empirical insights into the nature and demographics of distant terrestrial worlds. Up to what size and mass do planets typically have rocky compositions? How Earth-like are these distant rocky worlds? How common are rocky planets in the Habitable Zones of their host stars? This class will explore the current (and evolving) understanding of the answers to these questions.

The Physics of Energy and Sustainability
Peter Littlewood, Department of Physics
Harper Memorial Library, Room 130, 1116 E 59th St (78 seats)
This is a course that is provided for non-science majors to provide a physics perspective on the opportunities, challenges, and choices in energy. "Energy policy with numbers."

The Thrills of Discovery in Experiments
Cheng Chin, Department of Physics
Cobb Hall, Room 202, 5811 S. Ellis Ave (34 seats)
I will give a few examples of unexpected observations made by our undergraduate and graduate students in the lab:
(1) Thermal levitation of generic objects
(2) Bose fireworks from driven ultracold atoms"
The Tumult of Trade: A Case Study of Mexico and the American Rust Belt
Chad Broughton, Department of Public Policy Studies
Kent Chemical Laboratory, Room 102, 1020-24 E 58th St (50 seats)
Focusing on the past three decades, and by following the story of a factory relocation from Galesburg, Illinois, to the Mexican border city of Reynosa, Tamaulipas, this class examines the impact of North American economic integration (most famously, NAFTA) on vulnerable industrial and agricultural workers in both Mexico and the United States — in particular, the lives and politics of working class communities of the Rust Belt.

What is a Novel?
Thomas Pavel, Department of Romance Languages & Literatures
Cobb Hall, Room 402, 5811 S. Ellis Ave (34 seats)
A reflection on the origins of the most popular literary genre.

Session 2: 11:00AM-12:00PM

Arabic Language & Culture; Novice Level
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Beginning French
Nadine Di Vito, Department of Romance Languages & Literatures
Cobb Hall, Room 403, 5811 S. Ellis Ave (30 seats)
This class is a good indication of how we teach our beginning-level French language courses. The textbook and audiovisual materials, newly published by Georgetown University Press, were developed by the instructor and her UChicago colleague and are based in sociolinguistic and foreign language acquisition research.

Blockchains, Cryptocurrencies, and Bitcoin
Gina Pieters, Department of Economics
Ida Noyes Hall, West Lounge, 1212 E 59th St (80 seats)
This model class will discuss cryptocurrencies and blockchain: What are they? How do cryptocurrencies differ from each other? If they have any impact at all, who could they change the global economy?

Cut from the Cave Temple: Fragments of Art History
Chelsea Foxwell, Department of Art History
Saieh Hall for Economics, Room 203, 1160 E. 58th Street (48 seats)
This Art History class examines East Asian Buddhist statues and other objects that have found their way into museums around the world.
Economics, Sports, and the Law
Allen R. Sanderson, Department of Economics
Saieh Hall for Economics, Room 021, 1160 E. 58th Street (92 seats)
North American sports leagues, individual professional sports such as tennis or golf, and college athletics are inexorably a mix of physical and mental competitions, economics, and the law. In our hour together we will trace the economic, statistical and legal underpinnings – famous court cases and legislative initiatives – that shape and complement what fans view from the stands, on their 60-inch flat-screen receivers, or on their smart watches and iPhones.

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Global Health Sciences III: Biological and Social Determinants of Health
Olufunmilayo Olopade, Department of Medicine
Cobb Hall, Room 202, 5811 S. Ellis Ave (34 seats)
The class will explore emerging concepts in health and well-being, reimagine Global Health as an interdisciplinary field of study and discuss the Institutions and forces shaping the future.

Images of Inspiration: an Introduction to Iconographic Analysis
Karin Krause, Divinity School
Kent Chemical Laboratory, Room 101, 1020-24 E 58th St (50 seats)
We examine selected visual images from Byzantium that make claims about the divine inspiration of Christian sacred writings. The discussion of sample images and relevant textual sources offers insight into scholarly approaches to visual analysis. More generally, the class illuminates phenomena that are typical of Byzantine art and religious culture.

Law and Economics: A Guided Tour
Jim Leitzel, Department of Public Policy Studies
Stuart Hall, Room 102, 5835 S. Greenwood Avenue (60 seats)
The University of Chicago has been at the forefront of the Law and Economics movement since its modern conception. But what exactly is Law and Economics all about? This model class offers a guided tour through some of the highlights. Fellow travelers will visit the British Museum and a deserted isle, mingle with Vladimir Nabokov and Jeremy Bentham, and return safely to Chicago. No visas and no immunizations are necessary, but a sense of adventure and discovery will help open up the unexpected vistas of Law and Economics.

Matter, Energy, Space, and Time: Fermi Problems
Erik Shirokoff, Department of Astronomy & Astrophysics
Harper Memorial Library, Room 140, 1116 E 59th St (92 seats)
Fermi problems and quantitative ways of knowing: it's astonishing how much you know without knowing it! We'll explore some fun examples of how systematic, quantitative analyses and error
estimates can be useful both in everyday life and in building an intellectual toolkit vital to understanding recent discoveries in astronomy.

**Molecules that Changed the World**  
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**Signal Analysis for Neuroscientists**  
*Wim van Drongelen, Department of Pediatrics & Computational Neuroscience*  
**Biological Sciences Learning Center, Room 401, 924 E. 57th St (20 seats)**  
This class will provide an overview of analysis and modeling approaches to examine neural activity.

**Teaching Portuguese and Spanish to Heritage Language Learners**  
*Ana Maria Lima and Lidwina van den Hout-Huijben, Department of Romance Languages & Literatures*  
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American economic integration (most famously, NAFTA) on vulnerable industrial and agricultural workers in both Mexico and the United States — in particular, the lives and politics of working class communities of the Rust Belt.

**Turing and the Invention of Computer Science**  
*Janos Simon, Department of Computer Science*  
**Cobb Hall, Room 430, 5811 S. Ellis Ave (Capacity: 24 seats)**  
The question "What can be computed?" (and the related question "what is computation?") were precisely stated in a landmark 1936 paper by Alan Turing. His answer is embodied in today's computers—and it, and many of its other important consequences can be explained in a single lecture.

**What is a Novel?**  
*Thomas Pavel, Department of Romance Languages & Literatures*  
**Cobb Hall, Room 402, 5811 S. Ellis Ave (34 seats)**  
A reflection on the origins of the most popular literary genre.

**Why Most Scientific Findings are False (and How to Figure Out Which Ones are True)**  
*Anthony Fowler, Harris School of Public Policy*  
**Stuart Hall, Room 101, 5835 S. Greenwood Avenue (75 seats)**  
News reports (and even our academic journals and classes) are chock-full of wrong or misleading scientific results. Why can't we trust most scientific estimates? This class explains the problems of multiple testing and selective reporting, and it provides some tools for figuring out which scientific findings are likely to be right.

**100 Years of Astronomical Photography**  
*Rich Kron, Department of Astronomy & Astrophysics*  
**Social Sciences Building, Room 122, 1126 E 59th St (150 seats)**  
Half-a-dozen undergraduates have been digitizing some of the original glass photographic plates in the archive at Yerkes Observatory to assess the scientific potential of the collection, measuring changes in the positions and brightness of stars over the past century. The effort involves the Department of Astronomy & Astrophysics and the University Library; it is out-of-class and exemplifies a different kind of learning experience for College students. This session will review some of the research experiences and problems tackled.

**Session 3: 1:00PM-2:00PM**

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Economics and November 3, 2020
Allen R. Sanderson, Department of Economics
Saieh Hall for Economics, Room 021, 1160 E. 58th Street (92 seats)
When we head to the polls next fall to vote for candidates for local, state and federal offices, as well as on various ballot propositions, our decisions will turn on many factors. But consideration of candidates' views on several key economic matters will be important to voters. During our hour together we will discuss how economists view the arguments when it comes to taxing wealth; the merits of several higher education proposals; whether or not to raise minimum wage rates or impose rent ceilings; how to deal with Chinese trade; and other hot-button issues.

Epidemiology and Population Health
Diane Lauderdale, Department of Public Health Sciences
Harper Memorial Library, Room 148, 1116 E 59th St (20 seats)
This class uses contemporary and historical examples to define the field of epidemiology and explain the fundamental challenge of determining causal relationships about risk factors and health based on observing people in the real world.

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Quantum Entanglement - From Spooky Action at a Distance to Future Technologies
Hannes Bernien, Pritzker School of Molecular Engineering
Kent Chemical Laboratory, Room 101, 1020-24 E 58th St (50 seats)
Quantum entanglement between spatially separated objects is one of the most intriguing phenomena in physics. In this class you will learn what entanglement is, how it can be created and how it can be used as a resource in quantum technologies such as quantum communication.

Science and the State in Asia
John Kelly, Department of Anthropology
Saieh Hall for Economics, Room 203, 1160 E. 58th Street (48 seats)
In 1963 Clifford Geertz edited a book based on conferences here at the University of Chicago, about the new states being created out of the decolonization of the European empires. Titled Old Societies and New States, and subtitled The Quest for Modernity in Asia and Africa, this collection of mostly anthropological studies quickly became the landmark study of new states and their aspirations, especially in Asia. This model class will begin with a short overview of that volume as if this was our
assigned reading, to reconsider, more than fifty years later, what we want to learn from the actual quests of the new states in Asia after World War II.

**Teaching Portuguese and Spanish to Heritage Language Learners**  
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**What's the Problem with the Gettysburg Address?**  
*Larry McEnerney, Collegiate Humanities Division*  
*Social Sciences Building, Room 122, 1126 E 59th St (150 seats)*  
Actually, it turns out that the Address has several problems, and they are all to the good. Except for one paradox: the Address is arguably the best public text ever written in the United States, but it causes serious problems if you're teaching people how to write. In this session, we'll take a look at what makes the Address a work of genius, and a pain in the neck.