



Special Seminars Offered in Semester 2, AY2017/2018  
(Updated as of 24 January 2018)

Special Seminars					
Module Code	Module Title	Class Schedule	M C	Venue	Instructor Name and Profile
YSH2441	9 <sup>th</sup> – 10 <sup>th</sup> Century Baghdad	14 , 15, 16, 19, 20 March 2018 (Wed, Thu, Fri, Mon, Tue) from 6:00pm to 8:30pm	1	Global Learning Room 1	Prof Shawkat Toorawa  Profile: <a href="http://nelc.yale.edu/people/shawkat-m-toorawa">http://nelc.yale.edu/people/shawkat-m-toorawa</a>
YSH2442	Alternative Energy	12, 13, 14, 15, 16 March 2018 (Mon, Tue, Wed, Thu, Fri) from 6:00pm to 8:30pm	1	Kewalram Chanrai Room	Prof Gary Brudvig  Profile: <a href="http://chem.yale.edu/people/gary-brudvig">http://chem.yale.edu/people/gary-brudvig</a>
YSH2443	Reading Medieval Manuscripts	14 , 15, 16, 19, 20 March 2018 (Wed, Thu, Fri, Mon, Tue) from 6:00pm to 8:30pm	1	Classroom 9	Prof Jessica Brantley  Profile: <a href="https://english.yale.edu/people/tenured-and-tenure-track-faculty-professors-staff/jessica-brantley">https://english.yale.edu/people/tenured-and-tenure-track-faculty-professors-staff/jessica-brantley</a>
YSH2444	Chamber Music Performance	14 , 15, 16, 19, 20 March 2018 (Wed, Thu, Fri, Mon, Tue) from 6:00pm to 8:30pm	1	Practice Room 6	A/Prof Melvin Chen  Profile: <a href="http://music.yale.edu/faculty/chen-melvin/">http://music.yale.edu/faculty/chen-melvin/</a>
YSH2445	Transformations in Euclidean Geometry	14 , 15, 16, 19, 20 March 2018 (Wed, Thu, Fri, Mon, Tue) from 6:00pm to 8:30pm	1	Classroom 20	Prof Roger Howe  Profile: <a href="http://users.math.yale.edu/public_html/People/howler.html">http://users.math.yale.edu/public_html/People/howler.html</a>
YSH2446	Global Environmental Governance:	14 , 15, 16, 19, 20 March 2018	1	Classroom 17	Prof Benjamin Cashore

	Pathways for Sustainability	(Wed, Thu, Fri, Mon, Tue) from 6:00pm to 8:30pm			Profile: <a href="https://environment.yale.edu/profile/cashore/">https://environment.yale.edu/profile/cashore/</a>
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## Special Seminars

### YSH2441 9<sup>th</sup> – 10<sup>th</sup> Century Baghdad

**Pre-requisite(s):** None

Instructor: Prof Shawkat Toorawa

The founding of the Round City of Baghdad in the mid 8th century by the ascendant 'Abbasid dynasty ushered in a period of intense scholarly, administrative and artistic activity. The rulers patronized poets and prose writers and supported translation from Greek, Persian and other languages into Arabic; learned individuals hosted intellectual discussions (and meals and drinking sessions) late into the night at their homes; the literati spent entire nights in bookstores voraciously reading everything they could lay their hands on; theologians and philosophers debated the nature of reality and of God; scientists tested theories in engineering, medicine, and mathematics; and travelers reported their discoveries from China and India. For these, and many more reasons, the 9th and 10th centuries in Baghdad have come to be glorified as the 'golden age.'

In this Special Seminar, we will read works by and about Baghdadis, including Ibn al-Marzubani on why dogs are better than people, Abu Nuwas on wine and song, medieval graffiti, and gift lists. We will read about the caliph Harun al-Rashid and the elephant he sent Charlemagne, and the mystic al-Hallaj and how he was drawn and quartered and crucified. We will enter the world of the singing sensation 'Arib, who was the lover of some of Baghdad's most famous men, and some stories from the *Arabian Nights*. We will see how paper, books and writing changed Baghdad, Islamic society, and human knowledge; and how Arab-Islamic society's contributions changed the world.

### YSH2442 Alternative Energy

**Pre-requisite(s):** None

Instructor: Prof Gary Brudvig

Energy and environment are likely to be key themes that will dominate the way science and engineering develop over the next few decades. This course introduces different sources of alternative energy and the scientific basis behind climate change – the problem that drives the whole alternative energy project – and provides some fundamental concepts about solar energy utilization strategies in natural and artificial photosynthesis. The principles of light harvesting, charge separation and fuel production revealed by studies of the natural photosynthetic systems will be presented and related to artificial photoelectrochemical processes.

### YSH2443 Reading Medieval Manuscripts

**Pre-requisite(s):** None

Instructor: Prof Jessica Brantley

This seminar will introduce the physical parts and the social meanings of medieval books. We will focus mainly on late-medieval English manuscripts, making use of the extensive digital surrogates available online. Technical topics to be considered include the making of parchment, the sewing of quires, the construction of bindings, and the layout of the page. More interpretative challenges will include learning to read medieval scripts (paleography), and analyzing that ways in which many

varieties of decoration help to construct meaning. Includes an exploration of intersections between medieval manuscript culture and contemporary digital cultures.

**YSH2444 Chamber Music Performance**

***Pre-requisite(s):*** None

Instructor: A/Prof Melvin Chen

Students work in small (3-5) groups to prepare a movement from a chamber music work for public performance at the end of the course. They will be coached not only in musical, stylistic, technical, and historical issues related to the piece of music, but will also learn the fundamentals of playing in a small chamber group – how to lead, how to follow, methods of rehearsal, and navigating group dynamics.

**YSH2445 Transformations in Euclidean Geometry**

***Pre-requisite(s):*** None

Instructor: Prof Roger Howe

The role of symmetry in geometry was first understood clearly by Felix Klein in the late 19<sup>th</sup> century. Since then, transformations (specifically, rigid motions) have been an increasingly studied topic in geometry, and elsewhere in mathematics. However, the intricate connection between rigid motions and beautiful results about well-studied geometric configurations is rarely made explicit. This course will study rigid motions of the plane, with special attention to the insights they provide into plane geometry.

**YSH2446 Global Environmental Governance: Pathways for Sustainability**

***Pre-requisite(s):*** None

Instructor: Prof Benjamin Cashore

This special seminar identifies, examines, and explores, pathways through which individuals and organizations might champion effective “global environmental governance” strategies.

To accomplish this task the course is organized into five sessions. Session I: transnational pathways, assesses how practitioners might draw on global initiatives to influence ‘on the ground’ challenges in domestic settings. Session II identifies ‘bottom up’ path dependent policy interventions capable of gaining strength over time, and spreading outward. The course will apply these pathway frameworks to globally relevant forest and climate challenges including CO2 emissions, deforestation, and forest degradation. We will focus specifically on understanding how international cooperation over climate in general, and the December 2015 Paris climate agreement’s emphasis on “Nationally Developed Contributions” in particular.