

**Yale National Initiative
Seminars Proposed for 2015**

Jessica Brantley
Associate Professor of English
“Literature and Information”

Paul H. Fry
Professor of English
“Explaining Character in Shakespeare”

Roger E. Howe
Professor of Mathematics
“Problem Solving and the Common Core”

Mary T. Y. Lui
Professor of History and of American Studies
“History in our Everyday Lives: Collective Memory, Historical Writing, and Public History”

Brigitte Peucker
Professor of German
“Reading Literature through Film” or (alternative title) “Using Film in the Classroom”

W. Mark Saltzman
Professor of Chemical and Biomedical Engineering
“Physiological Determinants of Global Health”

Yale National Initiative
Proposed Seminar Description for 2015
Jessica Brantley
Associate Professor of English

Literature and Information

On Nov. 25, 2012, Sara Mosle published a column in *The New York Times* that posed an important question: "What Should Children Read?" Her answer: more good nonfiction.

Mosle was responding to the debate surrounding the Common Core State Standards adopted by most states to guide K-12 curricula. Among many other changes, these standards emphasize nonfiction ("reading for information") over more traditional kinds of literary texts (poems, plays, prose fiction). But reading is a complicated art. One reads to find the answers to questions, to entertain oneself, to communicate ideas, to move emotions – and the kinds of skills required to read are not divisible into neat categories. This seminar will explore many kinds of texts and a variety of ways of reading them, in order to clarify the relation between "literature" and "information."

Specifically, we will explore the relationship between fiction and nonfiction, and between "literary" writing and other kinds. This will open many large theoretical questions, such as how should we define "literature"? What are the purposes of reading? We will consider whether some kinds of texts offer "transparent" containers for information, and how students can learn to be critical readers of all kinds of writing. How can nonfiction writing be literary (or at least well-written)? What kinds of "information" do we get from reading fiction? We will think about subjectivity and objectivity, the value of the self, and the problems and opportunities introduced by personal perspective.

An important component of the seminar will be to consider the relation between students' reading and their own writing. Often an analytical paper is the response to reading literary fiction. But it is also useful to imagine the reverse: creative writing as a response to informational reading. We will also explore the usefulness of more direct models – reading poetry to write poetry; reading prose nonfiction in order to write it.

The seminar will focus specifically on the complicated but close relationship between literature and history, but we may consider other kinds of pairings of fictional with nonfictional subjects, such as literature and science, or even literature and math.

This seminar is intended to appeal to teachers of English language arts and other languages, literature, history and social studies, visual art, and drama in both the elementary and secondary grades. Specific reading selections will depend on the balance of Fellows in these different areas and on Fellows' plans for their curriculum units.

Yale National Initiative
Proposed Seminar Description for 2015
Paul H. Fry
Professor of English

Explaining Character in Shakespeare

We're in the classroom and we tell our students that Othello is jealous. What do we mean? That he's jealous by nature? That he isn't jealous by nature but that Iago can therefore take him by surprise and create an obsession? That something in his status as an outsider – a racial outsider in particular – makes him prone to jealousy? And above all, whichever position we wish to defend, how do we make it stick? How do we find evidence in the text or in an imagined or real performance to support our opinion, and how do we teach our students to do likewise?

In this seminar we shall work on the problem of how to defend our interpretations of Shakespeare, drawing primarily on textual evidence while becoming aware of conflicting textual evidence and learning to what extent in a given situation we can rely on gut feelings. Much of our attention will be devoted to leading characters, and to that end I have chosen plays in which the main character's identity (including racial and gender identity where appropriate) is both a central issue and a puzzle. For example, at the end of *Taming of the Shrew*, when Kate is clearly no longer a shrew, has she become submissive or has she now chosen to be subversive? (And why for that matter was she a shrew in the first place?) Is Romeo in love with Juliet or is he in love with love? Is Hal in *Henry IV Part I* a manipulative cynic from the beginning or is he a true crony of Falstaff's until circumstances reclaim him for the throne? How can we explain the behavior of anyone in *Merchant of Venice*, not just Shylock's but Portia's or Antonio's? And what can we possibly make of Hamlet? Is he crazy? What are his feelings toward his mother? Does he love Ophelia? Is he religious or an existentialist? Does he think too much to act? Etc.

But we will also ask questions about other things, the sorts of questions our students are likely to ask us. Does Iago have a motive, and if so, which one? What does Shakespeare think of Falstaff? Of Hotspur? Why is Mercutio killed? What does Portia mean when she says "The quality of mercy is not strained?" Is it a good thing when Jessica elopes with her father's money? Would Ophelia have been a suitable match for Hamlet? (Gertrude thinks so, but Polonius and Laertes have thought not.) Our whole emphasis will be on finding evidence to defend viewpoints.

For the May weekend we'll discuss *Romeo and Juliet*. Then in July we'll study *Henry IV Part I*, *Hamlet*, *The Merchant of Venice*, *Othello*, and *The Taming of the Shrew*, probably in that order. You can write curriculum units about plays that you teach, not just those we'll study. Teachers of younger grades are welcome, and welcome to work on chapter books or graphic versions of Shakespeare plays for young people.

Yale National Initiative
Proposed Seminar Description for 2015
Roger E. Howe
Professor of Mathematics

Problem Solving and the Common Core

Solving problems, especially word problems but also other kinds, receives substantial emphasis in the Common Core State Standards for Mathematics (CCSSM). The CCSSM sets broad goals for problem solving in virtually every grade K-8, and continues that emphasis into high school. Here are some examples:

- G1: Represent and solve problems involving addition and subtraction.
- G3: Represent and solve problems involving multiplication and division.
- G5: Use the four operations with whole numbers to solve problems.
- G7: Analyze proportional relationships and use them to solve real world and mathematical problems.

In fact, problem solving has always been a weak point in US mathematics education, but the CCSSM gives us a new chance to build capacity in that area. Besides putting considerable emphasis on problem solving activity, it provides a summary of research in mathematics education that supports use of word problems to help students understand the operations.

This seminar will focus on constructing collections of word problems that provide robust and balanced practice in critical techniques, and at the same time help students understand what mathematical concepts mean and what they are good for.

Yale National Initiative.

Proposed Seminar Description for 2015

Mary T. Y. Lui

Professor of History and of American Studies

History in our Everyday Lives: Collective Memory, Historical Writing, and Public History

We experience history in our everyday lives whether we drive down Martin King Boulevard or go past a World War II monument on our way to school or work. Or we might watch a documentary film on television or hear a song on the radio that illuminates issues of political or social struggle from the past. What makes certain moments in our history worth remembering and commemorating in the form of family stories, public monuments, preserving in historic houses and libraries, or evoking in songs or film? Whose stories are remembered and why? And are forgotten histories truly forgotten or are their traces in the built environment and in our lives awaiting our rediscovery?

The aim of this seminar is to explore the history produced in the university and the circulation of ideas among a broader public, between academic expertise on the one hand and non-professionalized ways of knowing and thinking on the other? By exploring a range of public history projects, we will discuss how teachers and students might use their everyday surroundings to reinvigorate the study of local or national histories that appear in the curriculum? We will consider the importance of searching for alternative sources of information beyond the textbook and discuss how to empower students to be historical researchers, thinkers, and writers. Teachers will learn to locate and analyze a range of primary sources – photography, films, newspaper articles, cartoons, census data, maps – that will bring this history to life in their own classroom teaching. At the same time, we will consider meaningful ways to interpret and represent that history to share with the greater public.

Suggested Texts:

Craig E. Barton, *Sites of Memory: Perspectives on Architecture and Race*

Susan Porter Benson, Stephen Brier, Roy Rosenzweig, *Presenting the Past: Essays on History and the Public*

Dolores Hayden, *Power of Place: Urban Landscape as Public History*

James Horton, *Slavery and Public History*

Ivan Karp, Christine Kreamer, and Steven Lavine, eds., *Museums and Communities*

Reading Literature through Film or (alternative title) Using Film in the Classroom

This seminar focuses on how adaptations of primarily literary texts use the medium of film to convey meaning. Film tells stories by means of images, camera work, and editing procedures; color, sound, and music are also central to narration. The formal procedures of the film medium both convey information and produce emotion in the spectator. A film sequence may be long or short, for example, thus producing suspense, anxiety – or boredom. It may be shot with a mobile camera or a stationary one, from above or below, prompting us to ask whose eye is looking. Is it a character that looks; is it a narrator? A garish color scheme may set the tone for violence, or it may simply be theatrical or suggest gaiety. Music can be part of the story – as, for example, when a character sings or plays the piano – or it can be superimposed on the images, as in the scary music that accompanies a horror film. All of these devices shape the way we read a film.

In the seminar, we will analyze film adaptations from these formal points of view in order to ask the following questions: How is the story told? Does the film tell the same story as the literary text? Or does it tell a different story and, if so, why and how? How does it color our emotions? What is its goal in doing so?

I suggest that we look at the following films, but others might very well be chosen, and I also list some possible alternatives below. The films on the “Suggested” list are chosen to be suitable for and appeal to a range of ages, since an animated film and a children’s classic are included. The list is comprised primarily of recent films, which probably have more appeal for today’s students. If participants are interested in using a fiction film to illustrate a history lesson, we might include *Lincoln* (dir. Steven Spielberg, 2012).

Suggested texts:

- **The Great Gatsby* (F. Scott Fitzgerald; dir. Baz Luhrmann, 2013)
- **Beloved* (Toni Morrison; dir. Jonathan Demme, 1998)
- **A Christmas Carol* (Charles Dickens; dir. Robert Zemeckis, 2009).
- **The Secret Life of Walter Mitty* (James Thurber; dir. Ben Stiller, 2013)
- **The Old Man and the Sea* (Ernest Hemingway; dir. Aleksandr Petrov, 1999; a 10-minute animated short, nominated for Academy Awards and appropriate for children)
- **Harry Potter and the Philosopher’s Stone* (J.K. Rowling; dir. Chris Columbus, 2001)

Alternative suggestions/substitutions:

- **To Kill a Mockingbird* (Harper Lee; dir. Robert Mulligan, 1962)
- **The Color Purple* (Alice Walker; dir. Steven Spielberg, 1985)
- **Romeo and Juliet* (Shakespeare; Baz Luhrmann, 1996)
- **Sleeping Beauty* (fairytale; Disney animation; dir. Clyde Geronimi, 1959)

Yale National Initiative
Proposed Seminar Description for 2015
W. Mark Saltzman
Professor of Chemical and Biomedical Engineering

Physiological Determinants of Global Health

This seminar will focus on several related questions: What does it mean to be healthy? What are the major barriers to health, and can these barriers be surmounted? How does health differ among the nations of the world?

To address these questions, we will focus on the biological and physiological functions that lead to a state of health in an individual and a population. First, we will consider health at the cellular and molecular level by focusing on four of important determinants of health:

- Genetic variability and its relation to human disease,
- The role of the immune system in protecting health,
- The interaction of microorganisms with humans,
- And the cellular basis of cancer.

These cellular and molecular mechanisms will be discussed in the context of major sources of global disease burden including cancer, HIV/AIDS, and other infectious diseases. Second, we will build on these cellular and molecular determinants to examine key physiological systems that contribute to health: the endocrine system and control of metabolism, the reproductive system and its susceptibility to disease, the cardiovascular system and control of blood pressure, and the respiratory system and risks to health from the environment.

Throughout the seminar, two major themes will be explored: 1) the relationship between health and biological/physiological mechanisms (e.g. the molecular basis of inheritance, cellular interactions in the immune systems, microbial interactions with hosts, and lung mechanics); and 2) the development of technologies that enhance health (e.g. vaccines, contraceptives, insulin therapy) and technologies that harm it (e.g. tobacco, power generation by fossil fuels).

This seminar is appropriate for Fellows interested in biological or physical science at any grade level. In addition, the seminar will use quantitative descriptions of physiological systems, so Fellows interested in mathematics may also benefit. In addition, because there is so much popular material now written about the global health and causes of disease, this seminar may be of interest to Fellows interested in how students can read for information.