



THE ALUMNAE OF
NORTHWESTERN UNIVERSITY

**Celebrating 47 Years of
CONTINUING EDUCATION**

Daytime Noncredit Courses for the Public

*Sponsored by
The Alumnae of Northwestern University
Engaging Minds, Enriching Lives*

**Fall Quarter 2015
Tuesdays and Thursdays
September 24 – December 3**

- A. Nationalism and the Arts**
Faculty from various departments
Tuesdays, 9:30 – 11:30 a.m., September 29 – December 1

- B. Optimizing the Journey: Health and Wellbeing**
Faculty from various departments
Tuesdays, 12:45 – 2:45 p.m., September 29 – December 1

- C. The Great War: Gaining Perspective on World War I**
Faculty from various departments
Thursdays, 9:30 – 11:30 a.m., September 24 – December 3

- D. Falling Apart – America's Neglected Infrastructure**
Faculty from various departments
Thursdays, 12:45 – 2:45 p.m., September 24 – December 3

**Most courses are held in Norris University Center on the south campus.
Visit us at our website: nualumnae.org**



*100 years of
Engaging Minds, Enriching Lives*

**Celebrating 100 Years of Volunteer Service to Northwestern
University and the Surrounding Communities**

See the center insert for details regarding
our
Centennial Celebration.

2015 Alumnae Award

Gwynne Shotwell

President and Chief Operating Officer of SpaceX will receive our prestigious award on Thursday, November 12, from 4-6 p.m. at the spectacular new Mary B. Galvin Recital Hall in the Music and Communication Building on the Evanston campus.

We invite you to join us for this exciting event.

ABOUT NU ALUMNAE CONTINUING EDUCATION

Alumnae Continuing Education is a program of university level non-credit courses taught by members of the Northwestern University faculty. Established in 1968, this unique program is organized and run entirely by volunteers, all alumnae of Northwestern University.

Alumnae Continuing Education is open to everyone. It provides a stimulating opportunity for interested adults to gain a broad knowledge in many fields. All profits are given to the University in the form of scholarships, fellowships, and grants for carefully selected projects.

Registration and Class Location Information

To register for a course, see page 15, inside the back cover, or download a form from our website at: **nualumnae.org**

Most of our classes are held in Norris University Center on south campus; however, space, construction, and other scheduling problems may necessitate changes. If there is a change in venue, information will be mailed with your course entry card and also will be given on our website. Classes are rarely cancelled because of bad weather or for any other reason, but we **strongly recommend** that you routinely check our website or voicemail before heading to class to check for any changes.

We Invite You to Join Our Mailing List

If you do not currently receive our brochures and would like to be placed on our mailing list, detach the registration form on page 15, mark the box indicating you wish to be on the mailing list, and mail it to the P.O. box given. Or you may write out this information separately and send it to the P.O. box with a note requesting to be placed on the mailing list.

Other Questions?

Call our voicemail at (847) 604-3569 with any questions. We will make every effort to return your phone call within 24 hours.

Important Policy Notice: In order to respect copyright, rights of publicity, and other intellectual property rights, we forbid the taking of photographs or the making of video or audio recordings of lectures and class materials.

A. Nationalism and the Arts

Faculty from various departments

Tuesday mornings, 9:30 – 11:30 a.m., Norris University Center

Nationalism is a relatively modern phenomenon that is commonly characterized as a devotion to one's country or homeland. Yet, it is a historically complex theoretical idea that goes beyond simple notions of patriotism and ethnic origins. This course will be an eclectic lecture series in which we will explore the many ways that ideas of nationalism and national identity intersect with various forms of cultural and artistic expression.

Sept. 29 Nationalism and the Arts: An Overview Since 1789

Michael Dreyer, *Professor, Political Theory, Friedrich-Schiller Universität, Jena, Germany; former NU Visiting Professor*

From the mid-18th century, nationalism began to emerge as a potent historical force. This lecture will examine the political roots and various forms of nationalism, with a special focus on the historical use of the arts to further political goals and ideology.

Oct. 6 National Symbols in the Arts

Michael Dreyer

This class will explore examples of national anthems, paintings of historical scenes, and literary themes that echo a country's past and traditions, and how they are frequently employed to arouse feelings of patriotism and strengthen national identity.

Oct. 13 Monuments to Impress: Nationalist Sculpture and Architecture

Michael Dreyer

Commemorative public sculptures and monuments became a popular form of ideological propaganda in the 19th and 20th centuries, while various styles of architectural works were erected to institutionalize governmental power. We will discuss how larger-than-life art and buildings serve national needs.

Oct. 20 Nationalism in 19th Century Italian Opera

Jesse Rosenberg, *Associate Professor, Musicology*

Italian opera had its origins in aristocratic Renaissance courts of the late 16th Century. It had become thoroughly popular by the early 19th century, embodying the values of the middle class and its increasing resentment of foreign occupation. Rossini, Donizetti, and Bellini all produced operas marked by political ferment, but it is Verdi above all who became associated with the "Risorgimento" movement for Italian unification and independence. Do his works truly bear out this characterization? Recent scholarship has questioned Verdi's unofficial status as "il vate del Risorgimento" ("the bard of the Risorgimento"). This lecture will air various sides of this interpretive controversy.

Oct. 27 The Sceptered Isle:

English Nationhood in the Reign of Elizabeth I

Scott Sowerby, *Associate Professor, History*

This lecture will investigate national identity in Elizabethan England. It will focus on the Protestant Reformation and its impact on ideas of nationhood. We will look at portraits of Queen Elizabeth and will examine texts written by John Foxe and William Shakespeare.

Nov. 3 True North: Nationalism in the Music of Grieg, Sibelius and Nielsen
Stephen Alltop, *Senior Lecturer, Conducting and Ensembles*

Dr. Alltop explores works of the best known Nordic composers, including Grieg, Sibelius and Nielsen, and the special place these composers have in their homelands.

Nov. 10 The Paris International Exhibition, 1937
Christina Kiaer, *Associate Professor, Chair, Modern Art*

This lecture will examine the 1937 national pavilions, especially the Soviet, German, Italian, and Spanish pavilions and their representations of nationalism and ideology through modern art and architecture. This was the famous moment of the face-off between Soviet and Nazi pavilions, with the German eagle on top of the Nazi structure and the huge statue by Vera Mukhina of the *Worker and Collective Farmer* on top of the Soviet one. A major highlight from the Spanish pavilion was the display of Picasso's *Guernica*.

Nov. 17 Nationalism and Culture in the Balkans and Central Asia
Andrew Wachtel, *President, American University of Central Asia;*
Bertha and Max Dressler Professor in the Humanities;
Slavic Languages and Literatures

The creation of an image of the nation is primarily a cultural process, first proposed by intellectuals (often writers and linguists). In the Balkans, the process of nation creation began in the late 18th century and was more or less complete by the beginning of the 20th century. In Central Asia, the process is ongoing. The lecture compares these two regions and notes both similarities and differences in the process of nation building.

Nov. 24 Poetry and National Identity: The Poland Question
Clare Cavanagh, *Professor, Slavic Literatures, Comparative Literary Studies;*
Chair, Slavic Languages and Literatures

Student uprisings marked Warsaw no less than Berkeley, Paris, or Tokyo in the tumultuous late 1960's. But the 1968 Warsaw student revolts had an unlikely cause: the Soviet-backed authorities had closed down a production of the Polish romantic drama "Forefathers' Eve" (1832) for its anti-Russian sentiments. Why should Adam Mickiewicz's great verse drama have provoked events that likely contributed, in hindsight, to the end of Soviet rule in Poland two decades later? Prof. Cavanagh will address the formative role of romantic poetry in creating an "imagined community" that extended from the early 19th century through Poland's tumultuous twentieth-century history.

Dec. 1 "Italy is a Geographical Expression:"
The Failure of Nationalism in Italy
Ed Muir, *Clarence L. ver Steeg Professor of Arts and Science, History*

More than four hundred years before there was an Italian state, intellectuals debated the "language question." What would the "national" language be and how could defining it help create a unified state on the peninsula? In answer to this question, writers formed an elitist literary culture that has never penetrated very deeply among the Italian population and has failed to bridge the gap between the educated elite and the toiling masses. The result has been widespread distrust of all state institutions, the persistence of dialects in daily life, and regional identities stronger than a sense of the nation.

B. Optimizing the Journey: Health and Wellbeing

Faculty from various departments

Tuesday afternoons, 12:45 – 2:45 p.m., Norris University Center

We will hear from outstanding physicians and researchers who will illuminate the latest findings in the field of senior health and wellbeing. Topics covered include biological aging, cognitive neurology, orthopedics, palliative medicine, super-aging, cardiology, lifestyle and aging, and personalized medicine.

Sept. 29 The Biology of Aging – Keep Your Molecules Fit and Healthy **Rick Morimoto**, PhD., *Bill and Gayle Cook Professor of Biology;* *Director, Rice Institute for Biomedical Research*

Aging is a natural process. Why, then, do different organisms age at different rates? As frailty and disease often accompany aging, what can be done to optimize the health of our cells and tissues to prevent or delay age-associated degenerative diseases? We will learn about the biology of aging and the discovery of genes, molecules and pathways that enhance cellular function and protect against the accumulation of damaged molecules.

Oct. 6 Aging and Life Enrichment: Individual and Family Perspectives **Darby Morhardt**, *Research Associate Professor,* *Cognitive Neurology & Alzheimer's Disease Center*

Dr. Morhardt has over 30 years of clinical experience with cognitively impaired individuals and their families. He identifies service and education needs and promotes research participation with the goal of improving health outcomes for persons with dementia and their families. This lecture will address the diversity of the aging experience and the dynamic interaction between the older person and their social and physical environment.

Oct. 13 At the Forefront: **How Northwestern leads the Fight against Alzheimer's disease** **William Klein**, PhD., *Professor of Neurobiology and Physiology*

Alzheimer's is a \$200 billion a year epidemic that will confront virtually all families. This lecture will describe what Alzheimer's disease is and what makes it different from other dementias. It will tell the story of Northwestern researchers who are uncovering the cause of Alzheimer's and leading the way toward discovering a molecular basis for the cause, diagnosis, and treatment of the disease, and using this knowledge to develop a cure.

Oct. 20 Boning up for the Journey – **Preservation and Prevention in the Golden Years** **Dr. Andrew Bunta**, *Associate Professor, Orthopedic Surgery;* *Medical Director, Orthopedics, Northwestern Memorial Hospital*

Progress in healthcare has increased life expectancy and few, if any, advances equal the improvements in quality of life from joint replacement orthopedic surgery. For older adults to fully enjoy their retirement, they require skeletal health and mobility, since this helps to prevent fractures and consequent disability. Individuals must make concerted efforts to prevent osteoporosis, and healthcare providers must be prepared to evaluate and treat it when indicated.

Oct. 27 The Health Insurance Picture: How does it Affect Seniors? **Dr. Stephen L. Ondra**, *Adjunct Professor, Neurological Surgery*

A neurosurgeon and U.S. Army veteran, Dr. Ondra held key policy roles in the Obama administration. He now serves as the top clinical executive of Chicago-based health insurance giant Health Care Service Corporation, the parent company of Blue Cross/Blue Shield. He will address how the medical profession cooperates with the insurance industry to help people achieve their best possible personal health and wellness.

**Nov. 3 Support Across the Continuum of Care:
The Role of Palliative Medicine**

Dr. Martha Twaddle, *Associate Professor, Medicine;
Senior VP, Medical Excellence & Innovation, Journey Care*

When it comes to end-of-life and palliative care, it's critical to separate fact from fiction. Dr. Twaddle, a nationally recognized expert and past president of the American Academy of Hospice and Palliative Medicine, will discuss the vital role that supportive care, both palliative care and hospice care, plays when we are seriously ill. Her presentation will touch on the history of this care in our healthcare system, the evidence of its benefits and, more importantly, the impact that it has had on the lives of people and those who love them.

Nov. 10 Dementia, Aging and Super Aging: What's the Difference?

Emily Rogalski, PhD., *Associate Professor,
Cognitive Neurology & Alzheimer's Disease Center*

Memory complaints are widespread among the elderly, leading to the belief that a gradual loss of intellectual ability is an inevitable part of "normal" aging. However, recent data from our cohort of "SuperAgers," individuals in their 80s and 90s, suggest that it is possible to have memory test scores at or above the average range for healthy individuals at least 20 to 30 years younger. This session will describe the psychosocial, cognitive, neuroimaging, neuropathologic and molecular features associated with dementia, aging and SuperAging.

Nov. 17 A Guided Tour of the Human Heart

Dr. Robert Bonow,
Max and Lilly Goldberg Distinguished Professor of Cardiology

The human heart is a well-tuned piece of machinery that beats several billion times during a normal lifetime, pumps 1900 gallons of blood per day and consumes (and generates) more energy than any other organ in the body. It has been the subject of poetry, Biblical passages, historical misconception and a growing body of scientific knowledge. Like any other machine – with moving parts, fuel lines, and an electrical system – anything that can go wrong may go wrong. However, scientific discoveries are paving the way for healthier hearts and rejuvenating those that undergo wear and tear.

Nov. 24 The Power of Healthy Living: It's Never Too Late

Dr. Robert F. Kushner, *Professor of Endocrinology,
Director, Center for Lifestyle Medicine*

Lifestyle Medicine is a new discipline that has recently emerged as a systematized approach for management of chronic medical problems. Targets include diet, physical activity, behavior change, body weight control, treatment plan adherence, stress and coping, spirituality, mind body techniques, tobacco and substance abuse. This presentation will focus on the impact of a healthy lifestyle on chronic disease, the rarity of good health, and the challenges of implementing a healthy lifestyle on a daily basis.

Dec 1 Personalized Medicine

Dr. Al George, *Magerstadt Professor of Pharmacology;
Chair, Dept. of Pharmacology; Director, Center for Pharmacogenomics*

Personalized or precision medicine is a new term describing efforts to use genetic information to individualize medical treatments. This is conceptualized as the science behind giving the right drug, to the right person at the right time. This lecture will provide an overview of personalized medicine along with specific examples and highlight cutting edge research work in this area by Northwestern University scientists.

C. The Great War: Gaining Perspective on World War I

Faculty from Various Departments

Thursday mornings, 9:30-11:30 a.m., Norris University Center

The First World War was an unprecedented global historic event. It forever changed the international landscape, producing profound geo-political consequences for the remainder of the 20th century. Rather than being a strict chronological overview of the war, this course provides a series of explorations into the economic, political and social impacts of this cataclysmic conflict for the major belligerent nations.

Sept. 24 Nationalism and Empire: Origins of the War in Eastern Europe **Benjamin Frommer, Associate Professor, History**

The First World War began in Sarajevo with the assassination of Archduke Franz Ferdinand. The shots that felled the heir to the Hapsburg throne were but one manifestation of the disruptive force of nationalism that challenged and undermined the empires of Eastern Europe. This lecture will examine the rise of nationalism in the region and the steps that made a local conflict into a war for mastery of the continent.

Oct. 1 Meanings of the War and the War Guilt Question **Michael Dreyer, Professor, Political Theory, Friedrich-Schiller Universität, Jena, Germany; former NU Visiting Professor**

The totality and global reach of WWI left a powerful memory for all peoples and nations caught up in its destructive path. At the end of the war, Article 231 of the Versailles Treaty placed blame for the war solely on Germany and her allies. Prof. Dreyer will discuss war aims and how historians have continued to debate the issue of war guilt through the decades.

Oct. 8 Intellectuals and World War I: France and Germany **Michael Dreyer**

This lecture will explore the role of intellectuals, primarily in France and Germany, who grappled with their countries' involvement in the war. Most of them were relentlessly patriotic, but some groups wrestled with more complicated societal issues.

Oct. 15 The Liberal Polity at War (and After): Britain, 1914-1930 **Deborah Cohen, Peter B. Ritzma Professor of the Humanities, History**

How did the world's preeminent liberal government fight a total war that required unprecedented state intervention into the economy and private life? We'll consider how the British mobilized for the war and explore conditions of the home front. In the second part of the lecture, we'll explore the war's most visible victims: the 750,000 British men who returned from the war permanently disabled by injuries or disease.

Oct. 22 The Eastern Front: From the Baltic to the Balkans **Benjamin Frommer**

The classic American image of the First World War comes from the Western Front, where armies hunkered down in trenches, fighting horrific bloody battles for yards at a time. The Eastern Front, by contrast, witnessed massive movements of armies that advanced and retreated over hundreds of miles. These widespread battles were no less bloody, especially for the civilians who fled from or were deported by the warring powers.

Oct. 29 Hammer and Anvil: Germany and World War I
Peter Hayes, *Theodore Zev Weiss Holocaust Educational Foundation*
Professor, History

Professor Hayes will examine the German people's experience of World War I from the heady and exultant opening days to the bitter aftermath of defeat and recrimination. In the process, we'll see how the war and its traumatic effects shaped Adolph Hitler and breathed new life into German anti-Semitism, making the rise of the Nazi Party possible.

Nov. 5 Economic Causes and Burdens of World War I
Robert Coen, *Professor Emeritus, Economics*

World production and trade expanded enormously in the decades prior to World War I, presaging a bright future for free-market capitalism and unfettered international trade. However, the dividends of growth were unevenly distributed, and expansion of foreign trade and investment created conflicts over world resources and markets. These economic tensions were significant contributing causes of the war. Wartime mobilization required extensive economic planning and imposed enormous burdens on national and international financial systems. The toll of the war was great not only in lost lives and property, but also in turning back the clock on living standards and fracturing the economic institutions that had shown such promise for the future.

Nov. 12 United States and WWI – Bringing America into the War
David Zarefsky, *Owen L. Coon Professor Emeritus*,
Argumentation and Debate

After winning re-election on the basis that "he kept us out of war," Woodrow Wilson found in early 1917 that this stance was no longer tenable. This lecture will examine how Wilson defended U.S. involvement not on the basis of traditional national interest but with reference to democratic ideals. In turn, the nature of his defense led naturally to the priority he gave to the League of Nations when negotiating the postwar peace. Special attention will be given to Wilson's War message of 1917 and to his public advocacy of the League of Nations of 1919.

Nov. 19 From War to Revolution: Eastern Europe, 1917-1921
Benjamin Frommer

In the West the belligerents suffered immense human losses, but the states survived the war. In the East, by contrast, defeat meant the end of the warring Russian, Hapsburg and Ottoman empires. In their place communist revolutions and nationalist movements created a patchwork map of new states. This lecture will discuss how war led to revolution in the countries of Eastern Europe and how the postwar settlement left unstable ground for the future.

Nov. 26 THANKSGIVING – no class

Dec. 3 The Economic Aftermath and Legacy of World War I
Robert Coen

The war's vengeful victors placed totally unrealistic reparation demands on the losers, holding back post war economic recovery. Germany, beset by hyperinflation and economic turmoil, turned to fascism. Britain, which had provided the crucial financial foundation for world prosperity preceding the war, went into steady decline. Chaos in currency and financial markets, along with growing tariff and other trade barriers, caused international commerce and investment collapse. The war itself was bound to have unfavorable economic repercussions for years to come, but the bungled economic and financial arrangements for the peace are probably more to blame for the ensuing world-wide Great Depression and WWII.

2015 Alumnae Award Presentation

to

Gwynne Shotwell

Thursday, November 12, 2015

4:00 – 6:00 p.m.

Mary B. Galvin Recital Hall

Music and Communication Building

70 Arts Circle

Evanston, Illinois 60208

We invite you to save-the-date and join us for this exciting event at the spectacular new Mary B Galvin Recital Hall.

As part of our year-long Centennial celebration, we will be honoring **Gwynne Shotwell** with the **2015 Alumnae Award**. President and Chief Operating Officer of SpaceX, Gwynne received both her undergraduate and master's degree from McCormick School of Engineering and Applied Science.

In 2002 Gwynne was SpaceX's seventh employee when she was hired as Vice President of Business Development. In that position she helped develop the Falcon rocket family of vehicles, which resulted in more than 50 space launches. Responsible for day-to-day operations, Shotwell now manages nearly \$5 billion in contracts, including a \$1.6 billion contract with NASA to deliver supplies to the International Space Station.



THE ALUMNAE OF
NORTHWESTERN UNIVERSITY

*100 years of
Engaging Minds, Enriching Lives*

Dear Alumnae Continuing Education Participant,

2015-16 marks the **Centennial** of The Alumnae of Northwestern University. To celebrate its rich tradition and expand opportunities for Northwestern students, The Alumnae is establishing an **Alumnae Centennial Endowment for Undergraduate Research**.

Independent undergraduate research is an increasingly vital component of today's college education. The Centennial Endowment will provide students in all academic areas with an opportunity to enhance their undergraduate experience by developing and completing independent research and creative projects.

We invite you to make a gift to the Endowment. To make a contribution, please see the next page.

All gifts count toward
We Will. The Campaign for Northwestern
and will be recognized in
The Alumnae Centennial Honor Roll of Donors.

**Thank you for supporting
The Alumnae Centennial Endowment for Undergraduate Research**

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Memo: **Alumnae Centennial Endowment**

*(Use separate checks for your contribution and course enrollment.
They are deposited into different accounts.)*

Mail check and form to: The Alumnae of Northwestern
P.O. Box 2789, Glenview, Illinois, 60025-6789.

If you are attending Continuing Education classes, you may hand your check and this form to an Alumnae member.

- I am enclosing my company's matching gift form.

Gifts by credit card:

- Please visit our website nualumnae.org for additional information.

**Thank you for supporting
The Alumnae Centennial Endowment for Undergraduate Research!**

Summer Undergraduate Research Grant **(SURG)**

SURG's provide a \$3,000 stipend to cover living and research expenses for full-time eight week independent academic and creative work in **all fields of study** under faculty supervision. Proposals from students are reviewed by a faculty committee from across Northwestern University.

Undergraduate Research Assistant Program **(URAP)**

The **URAP** offers Northwestern University faculty the opportunity to hire an undergraduate student to work with them on research or creative projects. The program is designed for the faculty to teach the students the skills needed to later pursue their own independent projects. Applications come from the faculty members. They may apply with a particular student in mind, or specify qualifications and the Office of Undergraduate Research runs a search for a student that matches the qualifications.

Information from the Office of Undergraduate Research

For more information:
Office of Undergraduate Research
<http://www.northwestern.edu/our>

D. Falling Apart – America’s Neglected Infrastructure

Faculty from various departments

Thursday afternoons, 12:45 – 2:45 p.m., Norris University Center

This course examines America’s infrastructure: past, present and future. An overview of the state of our deteriorating roads, bridges and rail systems will be provided as well as an exploration of ways to address these issues through funding, new materials, smart and renewable cities, efficient architecture, and autonomous vehicles. Join us as we touch on these topics and concerns regarding the future of America’s infrastructure.

Sept. 24 Taller, Longer, Lighter: the Evolution of Structures

David Corr, *Charles Deering McCormick University Distinguished Clinical, Professor, Civil and Environmental Engineering*

The structures built by human civilizations become permanent symbols of the social needs and scientific capabilities of society at the time they are constructed. The best examples of permanent structures are works of civic art, and as such are the creative expressions of the structural designer. In this session we will explore the evolution of structures through the 19th and 20th centuries in the industrialized world. We will discuss key elements of structural design and crucial technological developments such as structural steel and reinforced concrete. Structures to be discussed include the Eiffel Tower in Paris, Brooklyn Bridge in New York, and the John Hancock Center in Chicago.

Oct. 1 Infrastructure’s Report Card and the Question of Hydraulic Fracturing

Charles H. Dowding, *Professor and Associate Chair, Civil & Environmental Engineering*

The American Society of Civil Engineers assess the condition of American infrastructure with a report card, whose “C-“ GPA would prevent it from being accepted at any university. What are its components? Why is the grade so low? What will it take to raise the GPA? What is the level of expenditure compared to the gross domestic product? How does location preference affect risk of infrastructure failure?

Operation of the infrastructure is inextricably entwined with the cost of energy. Hydraulic fracturing has reduced dramatically the price of petroleum energy, disrupted the cost of all alternate forms of energy, and is changing the operation of the infrastructure. Discussed will be the thoughts of those who extol its promise, those who decry its shortcomings and those who are concerned for changes it can produce with and without adequate regulation.

Oct. 8 Emerging Transportation Technologies

Hani Mahmassani, *Professor, Civil and Environmental Engineering;*
William A. Patterson Distinguished Chair in Transportation

This lecture will explore advanced technologies for urban mobility, interconnected and autonomous vehicles.

Oct. 15 Keeping the GO in Chicago

Emily Kushto, *Adjunct Professor, Civil and Environmental Engineering,*
Illinois Department of Transportation Section Chief for CREATE

Chicago today remains the busiest rail hub in the United States. The Chicago Region Environmental and Transportation Efficiency (CREATE) program is a nationally prominent rail infrastructure program, managed by the unique partnership of U.S. DOT, State of Illinois, City of Chicago, Metra, Amtrak, AAR and six of the nation's Class I freight railroads to reduce train and auto delays throughout the Chicago Region.

Oct. 22 Smart City, Sustainable City?

Kimberly Gray, *Professor, Department of Civil & Environmental Engineering*

There is a very strong push to transform post-industrial, as well as new cities into Smart Cities in the name of efficiency, sustainability and equity. A Smart City employs information and communication technology to improve the overall urban experience. Thus, Smart Cities will be adaptive and resilient – better living through data or so the story goes. This talk will discuss the range of improvements made possible by the Smart City trend and if these types of changes, in fact, promote the sustainable reinvention of cities.

Oct. 29 Humanitarian Logistics with a Focus on Disasters

Karen Smilowitz, *Associate Professor,
Industrial Engineering and Management Sciences*

The devastation caused by the 2010 earthquake in Haiti was compounded by the significant logistical challenges of distributing relief to those in need. There has been growing work in the field of humanitarian logistics, as researchers and practitioners seek to develop and apply advances in information technologies, optimization techniques, networking power and the decision sciences to the critical and most challenging problems that arise in disaster relief distribution operations. These problems further differ in substantial ways from those that are addressed under “normal” conditions. They are more chaotic, highly time-sensitive, with incomplete or non-existent information, in rapidly changing environment, require difficult and ethically challenging trade-offs. This session will present an overview of some recent work in the field of humanitarian logistics and a discussion of open problems.

Nov. 5 Aging and Deterioration of Infrastructure Materials:

**Learning from the past, assessing the present, and predicting the future:
Science or Magic?**

Gianluca Cusatis, *Associate Professor, Civil and Environmental Engineering*

This lecture will deal with the important issue of the aging and deterioration of infrastructure materials: a problem at the forefront of civil engineering research that has profound impact on our society and our way of living. Despite the recognized importance of such an issue, entrenched practice and remediation approaches are, for the most part, empirical and fundamentally related only to the lifetime experience of a few capable professionals. However, one may argue that such “modus operandi” is only slightly better than predicting the future of infrastructures by looking into a crystal ball – it is more magic than science. On the contrary, this lecture presents a different vision in which “predictions” are based on rigorous experimental and computational research based on the analysis of the performance of infrastructure materials used in ancient settlements, modern infrastructures, and everything else in between.

Nov. 12 Potholes or Tolls – How Can We Pay for Our Highways?

Joseph L. Schofer, *Professor, Civil and Environmental Engineering,
Associate Dean, McCormick School of Engineering*

Are U.S. highways – and other elements of our transportation infrastructure – really falling apart? Why does it really matter? In this session we will review how we pay for highway infrastructure today and how we managed to fall behind in our payments. We will discuss the obstacles to assuring sufficient highway funding and consider whether the quality and reliability of our infrastructure actually makes it more difficult to secure new money to keep it in a state of good repair. We will look at funding options that have been considered, some strategies that have been implemented, and how this was accomplished. We will try to sort out financial “shell games” from some real solutions, and find some time to discuss the value of good governance and wise decision making.

Nov. 19 **Tall and Short Buildings Beyond “Modern”**
Laurence Booth, *Richard C. Halpern/Rise International Distinguished Architect in Residence & Clinical Professor, Civil & Environmental Engineering*

Architecture has moved from one fashionable style to another over the last century. Our future will demand buildings that perform with high efficiency, that are economical to build, that last a long time, and that inspire our society and express our culture. What do you call that style?

Nov. 26 **No Class Thanksgiving**

Dec. 3 **Infrastructure Failures:
Forensic Engineering and Structural Health Monitoring**
David Corr

Failures such as the I-35W bridge collapse in Minnesota and the collapse of the World Trade Center towers capture national attention, with society demanding answers to the question, “why did it happen?” When these collapses occur, professionals conduct investigations to determine the root cause(s) of the failure, in a practice known as forensic engineering. We will examine some prominent structural failures, track the investigations that followed, discuss the root causes of the failures, and discuss the lessons the profession has learned from each. A related topic is the field of structural health monitoring (SHM), in which sensors, data loggers, and database systems are employed to monitor the performance and condition of structures in service. We will discuss the uses of SHM, the benefits it can and cannot offer, and how SHM is currently being used to keep our nation’s infrastructure safely in service.

Preview of Winter 2016 courses

- A. ***Politics of Local Justice***, Mark Iris, Lecturer, Mathematical Methods in the Social Sciences
- B. ***Religious Thought in America***, Claire Sufrin, Lecturer, Religious Studies
- C. ***Psychological Science: 100 Years of Life Lessons***, Renée Engeln, Professor of Instruction, Psychology
- D. ***Great Composers: From Schubert to Gershwin***, Stephen Alltop, Senior Lecturer, Conducting & Ensembles

GENERAL PARKING AND BUS INFORMATION

- Registrants for one or more 10-week Continuing Education course may request a parking permit for the north half of the University's Ryan Field West Parking Lot D, located off Ashland Avenue just west of the stadium. Enter West Lot D at the north end of Ashland Avenue near the intersection with Isabella Street. **This permit is not valid for any other University lot.** Shuttle buses between West Lot D and class locations run every 15 to 20 minutes from 8:30 a.m. until 9:45 a.m. No buses run between 10:00 a.m. and 10:30 a.m. The "Early Bird Lunch Bus" begins loading at 11:00 a.m. for afternoon students planning to eat lunch on campus before class. Buses for afternoon classes then run every 15 to 20 minutes until 12:45 p.m. There is no bus service between 1:00 p.m. and 1:45 p.m. Bus service resumes at 1:45 p.m. and continues until twenty minutes after the last class ends, which is usually 2:45 p.m. Your "D" parking permit, mailed with your registration card, must be displayed with the printed side visible through the windshield. We strongly encourage carpools.
- Students attending *per diem* do not receive a parking permit and may not park in Ryan West Lot D. Parking permits for Lot D are limited to individuals who are registered for at least one full 10-week course. However, *per diem* students may ride the shuttle buses if they arrive at the lot by other means.
- To receive a parking permit good for the course term, you must request one by checking the parking box in the registration form on page 19. We will mail your parking permit with your class entry card before classes begin if your registration is postmarked on or before the early registration date of September 4, 2015. For registrations postmarked after September 4, class entry cards and parking permits will be held at the door.

ALTERNATIVE AND HANDICAP PARKING

- There is an Evanston city public parking garage four blocks southwest of Norris Center, just east of Chicago Avenue. It can be accessed from Clark Street or Church Street. (Church runs eastbound only.)
- Students with handicap license plates or placards are encouraged to park at Ryan Field West Lot D and take an Alumnae bus with a handicap lift, which delivers students to the door of Norris Center. A limited number of handicap spaces are available in the parking lot northeast of the McCormick Tribune Center. To reach this lot, enter the south campus on Campus Drive, go to the first stop sign, and turn left into the lot. In addition, there are more handicap spaces on the upper level, eastern end of the 2 tier parking lot just north of the visitors' center. A visitor's parking pass is not required to park in a handicap-designated space in this lot if your vehicle has a valid government handicap license plate or placard.

COURSE REGISTRATION INFORMATION

- To register for one or more courses, use or copy the registration form on the facing page. Make checks payable to: **Northwestern University**. Mail check, registration form, and parking pass request to:
Alumnae Continuing Education, P.O. Box 2789, Glenview IL 60025.
- **Early registration deadline is Friday, September 4, 2015.** For registrations postmarked by September 4, the cost is \$165 per course. Special savings for **one individual** signing up by September 4 for more than one course are listed on the registration form. After September 4, the cost per course is \$180.
- **To receive a parking permit**, you **must** register for at least one full 10-week course and **check the appropriate box** on the registration form.
- If your registration is postmarked by September 4 your class entry card, parking permit (if requested), and a “purple sheet” giving all class locations and times will be mailed to you about two weeks before classes begin.
- **PLEASE NOTE: Be sure to bring your class entry card to each class, as it must be shown to the proctors at the entry door. In order to guarantee seating for registered students, there will be only one time registrants will be allowed in with a temporary card. After that, they will be charged a replacement fee.**
- **Those registering after September 4** can pick up their class entry card and parking permit (if requested), on the first day they attend class and **will need to find alternative parking for that day**. Registrations cannot be confirmed by phone. Your cancelled check verifies your registration.
- **Enrollment may be limited by room capacity.** When applications exceed capacity, registrations will be honored in order of receipt, or if mailed, by postmark. If your requested course is filled, we will return your check.

Per Diem Students: When space allows, *per diem* students will be admitted for \$25 per class session. If a course is at capacity enrollment, *per diem* students will receive numbered cards and be admitted at the beginning of the class as space permits. Our website identifies courses that are closed because of capacity enrollment. *Per diem* students do not receive parking permits, so they must find alternative parking. **Guest passes are not valid for classes that are closed.**

Refund Policy: Before a refund can be issued, your registration card and parking pass must be returned. Send materials to Alumnae Continuing Education, P.O. Box 2789, Glenview, IL 60025. A processing fee of \$10 will be charged on all refunds. If you withdraw from class prior to the first meeting, a full refund, less the processing fee, will be given. After the first class meeting, an additional \$25 will be deducted from the refund. After the second class meeting, \$50 plus the processing fee will be deducted. Thereafter, no refunds will be given. A transfer, at no cost, to another class offered during the same quarter is an option, provided there is space available. Credits are not given for future classes.

Fall 2015 Continuing Education Registration Form

Please enroll me in the course or courses checked below.

Early fee per course per person, if postmarked by September 4:

- A. Nationalism and the Arts \$165
- B. Optimizing the Journey: Health and Wellbeing \$165
- C. The Great War: Gaining Perspectives on World War I \$165
- D. Falling Apart – America’s Neglected Infrastructure \$165

I would like a fall quarter Ryan lot PARKING PERMIT.

Parking permits for Ryan West Lot D must be requested with your registration by checking the box above. Otherwise, permits may not be available.

EARLY REGISTRATION FEE (through September 4)

One person attending 2 courses	\$300
One person attending 3 courses	\$430
One person attending 4 courses	\$550

Registrations must be **postmarked** by Tuesday, September 4, 2015, for **all** early fees listed above. **After September 4, the fee per course will be \$180, and there will be no discount for multiple courses.**

Name _____

Address _____

City _____ State _____ Zip _____

Phone (____) _____ email _____

- This is a new address.
- Add my name to your brochure mailing list.

Make your check payable to Northwestern University, and mail to:

Alumnae Continuing Education

P. O. Box 2789

Glenview IL 60025

(We are unable to accept credit card payment.)