ELLA SPRING SESSION 2022 May 2-20, 2022

Course Descriptions and Instructor Biographies

SCIENCE

22-S5 All the Light You Cannot See - The Science, Art and History of Medical Imaging

We hear about CAT scans, PET scans and MRI scans but few people understand the underlying scientific bases for these procedures. This course will explore the science of medical imaging and examine the medical information that we can obtain for each of the techniques. We will also explore the history and meet some of the personalities that played a role in developing these techniques. We will explore radioactive decay, the production of X-rays, the response of the body to magnetic fields and radiofrequency radiation and much, much more; all done in a user friendly and readily understandable manner. The "art" of medical imaging will explore how the physician uses this information to make medical decisions and personalize patient care. The course does not require a science background and is designed for the intellectually curious.

Instructor

John Mercer is a professor emeritus from the University of Alberta. He taught courses in the Faculty of Pharmacy and Pharmaceutical Sciences and in oncology in the Faculty of Medicine and Dentistry and had an active research program at the Cross Cancer Institute.

22-S7 Astronomy - Wonders of the Night Sky

In this course we will explore the many wonders of the night sky-- from blood red lunar eclipses to the the graceful dance of aurora to the diversity of stars overhead. The course will look at the underlying physics of stars and how we can learn about the workings of stars and galaxies. While there will be the occasional formula and some mathematics, the emphasis will be on developing your understanding and enjoyment of astronomy. As well there will be numerous links drawn between astronomical ideas and the arts. If conditions permit there will be an opportunity for a night time observing session.

Instructor

Brian Martin is a professor emeritus of physics and astronomy at The King's University, Edmonton. For as long as he can remember he has held a passion for the night sky. His professional career was devoted to understanding interacting binary stars as well as ways of communicating complex scientific ideas to students and the broader public. Before retirement, he was also co-director of The King's Centre for Visualization in Science.

22-S8 What's In Your Food? The Chemistry of What Makes Food Healthy, Colourful and Delicious

Ever wonder what gives bread its texture? What gives cooked bacon its aroma? How red peppers can save you from macular degeneration? This course will explore the chemistry of food and highlight some of the new discoveries that food chemists are making that are changing our ideas about food. We will learn about the compounds in food that affect texture, the molecules that affect colour, taste and aroma as well as the biology and chemistry of taste perception. We will also learn about how food is analyzed, which food chemicals are healthy (and which ones aren't) – and why. The goal of this course is to take some of the mystery out of your food and make chemistry a bit more fun – and interesting.

Instructor

Dr. David Wishart is a professor in the Department of Biological Sciences at the University of Alberta where he has taught since 1995. His research focuses on the nexus of chemistry, biology and nanotechnology. He has taught several ELLA courses on a variety of subjects.

22-S9 Marvels of Mathematics

How does social distancing change the spread of COVID, why do cicadas only appear in prime numbered years, what do cell phone antennas, African villages, and Lord of the Rings movies have in common? How is high school geometry now used to destroy kidney stones, how does a deck of cards hold more possibilities than there are grains of sand on earth, is there a best way to cut diamonds, how does UPC coding work? How are prime numbers used to protect online transactions, why are Pringles potato chips all the same, how are the digits of Pi used in forensic accounting, why should contestants always change doors on Let's Make A Deal? All of these have mathematical explanations. Let's explore these and other amazing connections between math and nature, music, art, finance, and more. Many hands-on activities.

Instructor

Len Bonifacio has been involved in math education for over 45 years, as a teacher, department head, provincial examiner, and district consultant. He is a contributing author to the math textbooks used currently in high schools in Western Canada. He was a co-winner of the MCATA Math Educator of the Year in 2000, and was twice a semi-finalist for a provincial Excellence in Teaching award.

22-S10 Simulation Technology - Educating Healthcare Providers in the 21st Century

Every health student needs to learn numerous healthcare procedures before providing services to patients with confidence. Health skills, ranging from giving a muscle injection to helping with baby delivery, are conventionally learned at the bedside of patients. At the U of A, like most other health institutes in Canada, we have developed simulation programs for skill training. Health students now have increasing opportunities to practice health skills without compromising the quality of patient care. In this course, we will overview simulation development, discuss its role in health education, and introduce cutting-edge technologies behind simulation design, including our efforts in searching for synthetic tissues, making 3D anatomic models, and designing the virtual reality for different training scenarios. Didactic lectures and in-class demonstrations will be provided for learners to explore simulation program at the U of A and meet with our simulation researchers and educators. We will discuss the barriers and challenges of integrating simulation to healthcare, and will be happy to receive comments and suggestions for future simulation development.

Instructor

Unlike most medical researchers focusing on patients and their health problems, *Dr. Bin Zheng* put surgeons under the spotlight. Explicitly, Dr. Zheng studies performance and cognition of surgeons during surgery, especially in image-guided and remote manipulated surgery, such as endoscopic and robotic surgery. As an engineer with full training in medicine, Dr. Zheng tries to understand surgeons' eye-hand coordination and decision-making under stressful environments like the operating room and emergency room. He then designs the training system to support the surgeons. Currently, Dr. Zheng is an associate professor in surgery and holds the Endowed Research Chair in Surgical Simulation at U of A. He collaborates with surgeons, engineers, clinical

educators, and psychologists to develop simulators, then evaluates the educational outcome of his simulation-based programs. His long-term goal is to promote the use of simulation in surgery for improving patient care and safety.

22-S11 Can Alberta's Crude Oil be Developed in an Environmentally Friendly Way?

What is the global perspective of Alberta's crude oil development? What are crude oils and their classification of light (or conventional) oil, heavy oil and bitumen? What are the different kinds of rock formations containing the crude oils? What are the current technologies being used to recover different kinds of crude oils in Alberta and their environmental impact? What are the new developing technologies that can be considered for Alberta's future crude oil development? The answers to these questions will be provided to better understand the challenges in balancing technology, environment and economics facing the Alberta oil industry. Ultimately, students should be able to provide their own answers to the topic of this course.

Instructor

David Law retired as Heavy Oil Technical Director from Schlumberger in 2015. He has over 30 years' experience in technology development in crude oil recovery. He holds MSc and PhD degrees from the University of Alberta, both in chemical engineering. He was a registered professional engineer until his retirement.

22-S12 Physics for Everyone!

Physics is the fundamental set of rules by which everything in the universe plays. The constant beat of your heart, the flash and crack of a lightning strike and even your cooling coffee are all physics. How can so many different things be described by a single science? The purpose of this course is for students to understand the most important rules of physics at a high level, instead of all of the rules of physics at a low level. We will learn simple, powerful and useful tools to explain topics like heat and energy transfer, gravity, light, electricity and the atom - all without the use of any detailed mathematics! These tools are practical and broadly applicable for regular people in their everyday lives. An underlying goal of this course is to learn how human beings have historically figured out the rules of physics, especially thousands of years ago with limited tools. This course will rely heavily on class discussion and debate and use a myriad of physical and visual demonstrations.

Instructor

Reuben Gazer is a physics enthusiast, magician, science educator and former data engineer and business analyst in Edmonton. Fascinated by the world around him, he believes that nothing is "obvious" about how things work and loves to understand the interaction of mathematics and the real, natural world. Reuben has a BSc in physics from McMaster and an MSc in astrophysics from the U of A in 2017. He has taught math or science in one realm or another for 10 years, runs his own math/science tutoring business, and regularly gives public talks on the importance of science and science communication to the public. Starting in September 2021, Reuben is completing a BEd after-degree to take his love of teaching into high schools here in Alberta.

22-S14 Illumination & Attraction

Since the Greeks discovered magnetite 2,000 years ago, electricity and magnetism have been subjects of scientific mystery. Today there are few devices that do not rely on these phenomena to operate. This course will provide the non-technical student with a general understanding of the role that electricity and magnetism play in our modern world. The course will be presented in three sections. Week 1 will provide an overview of the basic principles of magnetism and electricity and the scientists who discovered them. Week 2 will focus on the world of electric power. Traditional power generation, electric lighting (from carbon arc to LED), batteries, electric cars, and modern alternative energy technologies will be discussed. Week 3 will cover the broad engineering topics of telecommunications and digital electronics. Telegraph, telephones, vacuum tubes, radios, transistors, microwaves, microprocessors, and computers will be covered. State of the art topics such as fibre optics, satellite communications, the Internet, Wi-Fi, Bluetooth, and cell phones will be explained. During the daily lectures, the design of commonplace electromagnetic devices will be explained. This will include such things as key fobs, security cards, memory sticks, and even those portable devices in restaurants for you to pay your bill.

Instructor

Bob Rose is a retired electrical engineer and worked 35 years in Alberta's electric power industry. Bob has given 300 volunteer science presentations in Edmonton school classrooms. He has lectured at 14 science teachers' conferences. In 2009 he received a Fellowship from Engineers Canada for his lifetime contributions to the profession. Bob has been an instructor at six previous ELLA sessions.

22-S15 Dynamic Earth (CANCELED)

Earth is a unique planet. It contains wealthy resources and an environment just right for life. In this course, we will introduce how the Earth works to produce and maintain its surface morphology, natural resources, climate, environment and life. Examples of the topics include geological time, plate tectonics, minerals and rocks, natural resources (petroleum, ore deposits, diamonds), climate and environmental changes, human impact, origin of life, and search for life on other planets. Delivery of the course will integrate basic principles and examples from our own backyard (in the circum-Alberta area and sometimes more broadly across Canada).

Instructor

Long Li was trained in both geology and environmental sciences. His long-term goal is to understand how tectonic activities have shaped Earth's resources and surface climate and environment at a variety of time scales over Earth's history. His research has been specifically focused on geological and biological recycling of carbon, nitrogen and sulfur (the three elements not only essential for life but also crucial to energy, resources, climate and environment) between Earth surface and interior based on theoretical, laboratory experimental, and field studies.

22-S16 Introduction to Meteorology

This course will provide a high-level overview of "what makes the weather" ranging from large-scale systems covering entire provinces, down to local regimes. We will follow this with a look at some of the tools used to observe the weather-- from your local backyard weather station all the way to satellites hovering 36,000 km above the earth. To predict the future, numerical models combine the observed conditions with physical equations. We won't delve into the physics, but we will discuss some of the strengths and weaknesses of these models. Finally we'll see how the meteorologist puts it all together to provide your daily forecast.

Instructor

Ron Goodson worked for the Meteorological Service of Canada (part of Environment and Climate Change Canada) for 40 years as a development meteorologist creating and training techniques and tools used by operational meteorologists. He specialized in satellite meteorology but with a host of other

interests including numerical models applied to Arctic weather patterns and wind regimes.

WELLNESS & LEISURE

22-W7 Meditation Techniques for Mindful Living

Everyone can benefit from the practice of mindfulness in everyday life. In our Western society, the demands and stresses of daily life can leave us feeling overwhelmed, scattered, and emotionally unsettled. Studying the techniques of mindfulness and applying them in our daily life can stabilize our mind and help us cultivate the sense of inner peace we all desire. Kushok will offer wisdom and practical techniques to recognize and subdue negative feelings. In addition, he will guide participants in specific meditations to uplift their mind and cultivate positive emotions and the happiness we all desire. Questions are always welcome.

Instructor

Kushok Lobsang Dhamchö, after 30 years of study and service to Namgyal Monastery in Dharamsala, India, moved to Edmonton in 2000 to become Gaden Samten Ling's spiritual director. Since arriving in Edmonton, he has worked unceasingly to advance the vision of the society's founding teacher, Geshe Ngawang Kaldän. Kushok has introduced many new courses including Meditation: A Path to Happiness, and How to Practice Seeds of Happiness (Meditation for Parents and Children).

22-W8 Introduction to Genealogy

Take a journey with us to discover the basics of family history research online and offline. Learn how to locate the genealogical sources, keep on a meaningful research path, acquire the skills needed to organize and preserve your research findings, all while capturing the story of your ancestor. The course will cover church and civil registration records for birth, marriage and death, census records, migration records, land records, wills and probate records, newspapers and military records.

Instructor

Shannon Cherkowski and Tammy Lough enjoy coordinating genealogy classes and conferences and sharing their knowledge with those eager to start

on their family history. Tammy Lough has been researching family histories since 2001. She attained two Professional Learning Certificates in Genealogical Studies (PLCGS) in 2019 with the National Institute of Genealogical Studies, specializing in Canada and England. Tammy has been volunteering with the Strathcona County Library since 2012 providing one-on-one assistance to patrons researching their family history. She has given presentations at the library for the monthly genealogy meeting, "Family Tree Trackers" and won the Volunteer of the Year Award for the Strathcona County Library in 2018 with fellow recipient, Shannon Cherkowski. Shannon is an experienced genealogist who assists people worldwide with their genealogical journey. Shannon has provided genealogy presentations across Alberta, organized genealogy conferences, established the Family Tree Tracker Genealogy group in Sherwood Park and coordinated it for 7 years. She is currently a volunteer with the Alberta Genealogical Society and a member of the Ancestry Canada Family History Advisory Board. Shannon and Tammy taught Genealogy at ELLA in 2016 and 2019.

22-W9 Simplified TaiJi Quan - Wu Style

The Simplified 30-forms Wu Style TaiJi maintains the tradition of Yeung Style TaiJi. Elegant, graceful, circular movements help to relax while building harmony, coordination and balance in the body. Each class during the first two weeks will begin with 10-15 minutes of gentle warm-up exercise then continue to teach new forms. The last week will be used to practice all 30 forms. By then, everyone should have a fundamental understanding of TaiJi, and be able to complete the entire routine. Students must be able to stand for 30 minutes.

Instructor

Wai Keung Ken Chui is a certified instructor for TaiJi and Qigong. Ken taught for 10 years in Hong Kong before moving to Canada. Ken is also a registered and certified massage therapist in Hong Kong and Alberta. He believes proper posture leads to good health.

22-W12 Modern Board Games (CANCELED)

This course introduces students to the world of modern board games. In recent years, board games have become something of a pop-culture phenomenon. This is, in part, because in our current "digital age" people are increasingly being drawn back to media that allow them to connect with others in person, rather than through a screen. Beyond promoting more positive face-to-face social

interactions, board games have also been linked to potential health benefits, such as improved prevention of cognitive decline. Classes will be divided into instructional sessions and full gaming sessions. Instructional sessions will introduce students to a particular genre of modern board games, providing both historical background and cultural context, as well as teaching the rules of the game, which will be played the following class. Some games that we will be playing include Azul, Ticket to Ride, Codenames, and Carcassonne.

Instructor

Dr. Jared McGeough (PhD, Western University) has taught a variety of courses in Canadian, Romantic, Victorian, and Edwardian literature at Concordia (Montreal), the University of Regina, and ELLA. Current projects include editing digital editions of 19th-century author William Godwin's educational books for children, and a biography of his father, former NHL referee, Mick McGeough.

22-W16 Tips and Tricks for Creating Better Photographs

This course takes a step beyond novice photography and explores some of the techniques for specific types of photography. Each class will focus on a different genre of photography including candid photos, landscape, portraits, family and children, action and sports, wildlife, travel, macro and more. Participants will learn the proper camera settings for each type of photograph in order to yield the best results. Demonstrations of special equipment and lenses, practical hands-on exercises and a study of light will all help students to elevate their skills beyond a novice level. Beginner and intermediate level photographers will all find useful information presented in a fun and informative class.

Instructor

Chris Stambaugh has been a professional photographer for over 30 years. He is the past president of the Professional Photographers of Canada and has been a finalist for "Portrait Photographer of the Year" both provincially and nationally. Chris has been offering courses with ELLA for 5 years and has previously taught photography classes for NAIT, METRO and the Burwell School of Photography.

22-W17 Aging Backwards with Essentrics

Essentrics is an exercise program that draws on the flowing movements of Tai Chi which create health and balance, plus the strengthening theories of ballet which create long, lean flexible muscles and the healing principles of sciencebased movement which create a pain free body. In this course we will discuss specifically how this "feel good workout" is designed to reverse the effects of aging so that proper weight, flexibility, mobility, strength and good health can be maintained in middle age and well into our golden years. We will discover less stiffness, with relief from aches and pains, proper posture and better balance.

Instructor

Elizabeth Olson has been certified as a Level 4 Essentrics Instructor since 2006 and was trained under the tutelage of Miranda Esmonde-White, the creator of Essentrics and author of *Aging Backwards, Forever Painless* and *Fast Track to Aging Backwards*. She is an Alberta Fitness Leadership certified group fitness instructor and has led a variety of classes over the past 33 years.

22-W20 Line Dancing

Heel toe, round, shuffle, and here we go! If you love to dance and don't have a partner, then line dancing may be for you. Line dancing is popular among seniors, and it provides a good physical and mental workout. Learn fun and easy dances to a wide variety of music including country, pop/rock, and Celtic, just to name a few. No outdoor shoes permitted (bring a clean pair of comfortable shoes). Participants should be able to stand for 70 minutes and move forward and back and side to side. Also, bring a water bottle. You won't even know you have exercised until the class is over!

Instructor

Tracy Walters is an award-winning dancer from Spruce Grove where she lives with her husband Steven. Tracy's dancing career includes partner dancing, line dancing, clogging, and belly dancing. She has been a line dancing and clogging instructor for 27 years. Throughout her career as a dance instructor, Tracy has attended dance workshops, taught at several workshops, and has published and choreographed both line and clog dances. She addresses all styles and genres in her dance repertoire. Currently, Tracy teaches line dancing and clogging at various locations, mostly seniors' centres, in the Edmonton area and loves every minute of it!

HUMANITIES

22-H6 A Brief Introduction to Ancient Chinese Philosophy

Over the past 70 years, China has become one of the most powerful and influential countries in the world, the transition into communism suggesting a decisive break from past traditions and philosophies. Yet, these philosophies have not only survived, but have expanded their influence beyond its borders. This course introduces students to some aspects of these traditions in ancient Chinese philosophy, focusing on two of its most influential schools, Confucianism and Daoism. We will discuss the similarities and differences between these schools, including Confucian notions of family, piety, and sincerity, and Daoist ideas of humour, performance, and the "way". The course will also situate these philosophies in their time and place, while also suggesting ways in which they might be useful for us today.

Instructor

Dr. Jared McGeough (PhD, Western) has taught courses in literature and philosophy at Concordia (Montreal), the University of Regina, and ELLA. Current projects include editing digital editions of 19th-century author William Godwin's educational books for children, and a biography of his father, former NHL referee Mick McGeough.

22-H7 What's Fit to Print? - The State of Modern Journalism and Where it's Going

Have you ever wondered about the story behind the story you read in the newspaper, hear on the radio or see on the evening news? This course will dive into the nuts and bolts of modern newsrooms and how journalists select and report stories. Students will be introduced to methods for navigating public institutions like city hall and the courthouse. Finally, the course will examine how journalism has been reshaped by the internet, exploring issues like misinformation, the role of social media, and new media platforms like podcasts and digital start-ups.

Instructor

Paige Parsons is an award-winning journalist for CBC Edmonton. She reports on both local and national issues and has spent time covering everything from courts and crime to politics and agriculture stories. She previously worked for the Edmonton Journal.

22-H9 Introduction to Eastern Religious Traditions

It has long been suggested that while Western religious traditions are largely rooted in similar Abrahamic traditions, Eastern traditions are more disparate. While it is true that Eastern religious traditions (as defined through historical scholarship) cover a diverse region and carry with them a plethora of cultural differences, there are many converging and overlapping traditions and convictions within these belief systems as well. In exploring these intersections, this course will offer a brief overview of several fascinating Eastern religious traditions, including Hinduism, Buddhism, Jainism and Sikhism. The course will be lecture-style format, and will be supported with select documentary programs.

Instructor

Dr. Maryam Razavy is an adjunct professor in the Departments of Sociology and Family Medicine at the University of Alberta. Her research focuses on religion and violence, contemporary religious traditions, and religion and medical ethics.

22-H11 Higher education around the world and throughout the ages(CANCELED)

Higher education has a long history within many cultures in various parts of the world. It has evolved from its status throughout history as a fringe activity of tiny elites to the situation today, when higher education is a major determinant of our social and economic structure. After a brief discussion of the development of higher education in various parts of the world, we will look at the present status and structure of higher education throughout the modern world, with particular focus on Canada and the United States. The evolution of instructional techniques in higher education, as well as the evolution of the educational technologies used to support them, will also be discussed. Finally, some (educated?) guesses will be presented as to how higher education will evolve in the near future.

Instructor

Dr. Walter Archer has been a professor at the U of A and a professor and dean at the University of Saskatchewan. He served two years as president of the Canadian Society for the Study of Higher Education and is a Distinguished Member of that organization.

22-H12 The Rise and Fall of Socialism in Europe

The Industrial Revolution altered not only the economic fabric of Europe, but also society as a whole. These profound changes were not always welcome or beneficial and prompted a variety of competing visions and plans to reform, indeed, to transform, European society. With emphasis on the social and cultural history of Russia and Germany, this course will include an introduction to the social context and effects of industrialization; various socialist ideologies including Marxism, WW I and the rise of socialism, the Bolshevik Revolution, Stalinism, and the Cold War.

Instructor

Angeles Espinaco-Virseda has a PhD in the social and cultural history of modern Germany. One of her specialties is in social movements.

22-H14 The Origins and Evolution of French Presence in Alberta

To understand the place that the French language and Francophone cultures occupy in Alberta today, you must dissociate them from traditional notions of ethnicity. French was the language of people in Canada, Alberta, and from around the world. This "People's History of French in Alberta" approach requires an understanding of its speakers, both those who were born into a French setting and those who chose one. These French-speakers over time have included Indigenous peoples, settlers, migrants and immigrants. It also requires an understanding of the environmental, social, political, cultural, and economic forces that acted upon language and culture through the years, the strategies of resistance against those forces, and the ultimate impact of those strategies over time.

Instructor

Denis Perreaux grew up in Saskatchewan and has lived in Alberta for the last 30 years. He has a BSc in biology and an MA in history (2001) from the University of Alberta. Since 2000, his career has taken him from the federal government to the Association Canadienne-Française de l'Alberta and to his current position, as director general of the Société Historique Francophone de l'Alberta, where he has been applying his strategic, administrative and history-related skills since 2014.

22-H15 The Canadian Charter of Rights and Freedoms (CANCELED)

This course will focus on aspects of the Canadian Charter of Rights and Freedoms with a view to familiarizing students with its practical effects on Canadians: history of the development of the Charter, what rights were included and which were left out (Aboriginal rights and property rights for example), and a description of the seminal cases decided by the Supreme Court of Canada that assist with the interpretation of significant section of the Charter such as section 2 (freedom of religion, freedom of the press, freedom of association), section 7 (right to life, liberty and security of the person) and others.

Instructor

This course will be coordinated by *Patricia Paradis* and given by several University of Alberta professors from the Faculty of Law, as well as sessional instructors and practitioners in law.

22-H19 History of Canadian Working People

This course outlines the development of Canada as an industrial society with a focus on the people whose work built our nation-state. It traces the history of class conflicts and efforts by working people to be treated with dignity, including the creation of unions and political parties to defend their interests. The course critically examines how the work force became stratified along gender and race lines and how women, Indigenous people, and racialized workers have fought to end their exclusion from various forms of work and to increase pay and benefits in those areas of work that have been gendered and/or raced. As president of the Alberta Labour History Institute, Alvin will make rich use of materials on their website: interviews, videos, booklets, and photos that trace workers' history in Alberta, although the course will have a Canada-wide focus.

Instructor

Alvin Finkel is one of Canada's leading historians, the co-author of textbooks that have sold over 160,000 copies as well as monographs, book chapters, and articles that focus on many areas of Canadian history with an emphasis on labour history and the history of social policy. He taught history at Athabasca University for 36 years where he was the first historian to be hired. His latest book is *Compassion: A Global History of Social Policy*, the first effort to tell the history of the development of welfare states from a global perspective.

22-H20 2SLGBTQ+ People in Canada and Re/Emerging Issues

This course will examine several important issues faced by 2SLGBTQ+ people in Canada, both historically and today, following some primers on gender, sexuality and the "ABCs." Through a combination of lectures and facilitated discussions, the course will challenge popular notions that many of the issues faced by 2SLGBTQ+ people have been already "solved" through the legalization of gay sex in 1969 and same-sex marriage in 2005. Further, we will look at the diversity within this complex "community" and explore the tensions within it. Students will learn how 2SLGBTQ+ people, and their allies, actively address issues such as blood bans, trans people's access to services, policing, and the politics of pride.

Instructor

J.D. Crookshanks has a PhD in political science from the University of Alberta, specializing in Canadian, gender, and Indigenous politics. For three years, he co-hosted Gaywire on CJSR, Edmonton's only radio program dedicated to shedding light on and discussing queer and trans news, events, and issues. He has also taught a variety of courses in politics at two universities.

22-H21 Data Stories for Public Health Action

We all have stories about how injury or disease has impacted our lives or the lives of people we know and love. Stories about health and wellness, and about injury and disease can also be told through numbers. Through a mixture of lectures and hands-on learning, this course will provide an overview of how data stories play a critical role in public health. We will discuss how data has been used historically to inform public health action and will also explore current applications, including outbreaks of infectious and non-infectious disease. Through disease "detective work", we will examine how the stories told through data can prevent illness and ultimately reduce the impact of disease in our communities and around the world.

Instructor

Amy Colquhoun has worked in provincial public health surveillance for over a decade. She is currently the manager of Population Health Assessment with Alberta's Ministry of Health. Amy earned a PhD in epidemiology through the School of Public Health at the University of Alberta where she is now an adjunct professor.

FINE ARTS & ART INSTRUCTION

22-A7 Haydn Symphonies and Mozart Operas

Franz Joseph Haydn (1732-1809) is considered the father of the symphony. While Haydn did not write the first symphony, he nurtured the form and took it from its infancy to great heights. We will study examples from various parts of his career and observe how his style, the symphonic form, and orchestras changed over his lifetime. Wolfgang Amadeus Mozart (1756-1791) was a natural born composer of dramatic music. He was always on the search for an opportunity to write opera and could create characters and dramatic situations through music like no other of his day. We will study examples from The Abduction from the Seraglio, The Marriage of Figaro, Don Giovanni, and The Magic Flute, time permitting.

Instructor

Dr. Michael Roeder taught music history (Classical and Jazz) for nearly four decades at the U of A and, early in his career, at the University of California at Santa Barbara. Michael is passionate both about music and teaching, and these qualities have earned him the highest teaching award for professors in Canada: The 3M Teaching Fellowship. He enjoys teaching at all levels and has participated in ELLA for 8 years. His book, *A History of the Concerto*, is considered the major study of this musical genre.

22-A8 Pop, Politics & Protest

This encore and updated presentation of the history of the protest song spans centuries, styles, and causes of all kinds. With many musical examples, discover how people have chosen to "fight back" in song from the Tudors to Trump.

Instructor

D.T. Baker is a music historian and veteran ELLA presenter with over four decades in the music business in many different musical genres and occupations.

22-A9 Introduction to Choral Singing

Start your day with singing! This course is an introduction to singing technique, reading choral music, and making music as part of an ensemble. If you have had a lot of experience as a choral singer, or absolutely none, there will be something new in this course for you.

Instructor

Erin Craig is a born and raised Edmontonian and is proud to be working and teaching in this vibrant arts community. She is an active choral conductor and music director and an in-demand clinician and adjudicator for school and amateur choirs across Alberta. In addition to her work as a choral educator, she has an active performing and recording life as a vocalist and keyboardist.

22-A10 All Things Music IV

Hold on to your hats! Get ready for ANOTHER madcap caper through a wide range of musical topics. Join me in exploring bells and drums, discover some weird and wacky instruments, and be inspired by awesome child prodigies. You won't want to miss the classes on electroacoustic music, and music that tickles your funny bone! We'll address the healing power of music and then dance our way through 1920s salon songs. Through this class, you will gain awareness of the vast variety of music that is just waiting to be experienced. This course is completely new material, different from previous years' All Things

Music 1, 2, and 3. It is for the hardcore music lover, the music novice, or for anyone who wants to learn more about all things music!

Instructor

Rebecca Schellenberg has been delighted to teach at ELLA for three years. She is a violinist, music educator, and writer. She has performed her poetry and stories on CBC radio, at the South Country Fair and Banff Centre for Fine Arts. Rebecca has a Master of Music degree from the University of Alberta and a Bachelor of Music from Brandon University.

22-A13 Pilgrimage and the Camino: Cathedrals and Spiritual Tourism in the Middle Ages

The prevailing misconception about the Middle Ages is that it was dark, superstitious and violent, primitive in thought and devoid of culture and artistic achievement. And yet this image of the medieval world is far from accurate.

Nothing illustrates this better than cathedrals. They are spectacular examples of vision, engineering, and collective aspiration, and destinations for innumerable pilgrims that trod the roads of the medieval world. The 11-14th centuries in Europe were the "age of cathedral building." Hundreds were built in one of the most spectacular communal efforts in history. This course will highlight a series of structures: their engineering, rich sculpture, and magnificent stained glass set against the lives of their builders, dispelling the myth of the medieval period as an "age of darkness."

Instructor

Hoyne Santa-Balazs has been teaching art history in university for over 20 years on a wide range of subjects, from the Stone Age to contemporary art. Her focus of study is art and the law, art crime, and areas where these domains converge.

22-A14 What was happening in 1969? Literally! (CANCELED)

Review 1969 from the perspective of the rich literature created along with the evolutionary music and art worlds. Connect these three worlds with the historical and political events unravelling throughout western society, which continue to impact us. We will study various genres of writing such as the drama, the novel, poetry, non-fiction, and the short story. Step back into 1969 and remember the energy, the community, the uncertainty, and the rich literature that developed as a result.

Instructor

Brigitta Goerres has been involved in education for over 30 years. She began her career as a classroom teacher immediately after graduating from the University of Alberta. She then worked with the Ministry of Education for a decade as the Executive Director of Curriculum, partnering with an educational company to develop study tools (print and digital) for students, teachers, and parents. Currently, she has returned to a classroom setting with an audience of diversified learners with unique backgrounds and goals. She has also founded a consulting business to share ideas and methods to allow all learners the opportunity to reach their highest level of achievement and to inspire and motivate teachers. She is the author of 15 resources focusing on reading comprehension success and provides professional development workshops and courses to teachers of all levels.

22-A16 Learning to Play Again: Introduction to Improvisational Performance

Goofing off isn't just for kids! In this course, students will learn the fundamental skills of improvisation through play. Group games will get us up on our feet and exercising our brains. We'll explore the power of saying yes to our own ideas and the ideas of others, the joy of laughing at our mistakes, and the confidence that positivity yields. All the skills we cover not only prepare someone for the stage, but they also transfer to our everyday lives: active listening, building on the ideas of others, and collaborating effectively. Students can expect some light physical movement, participating in full class warm-ups, games with partners and in small groups, performing in front of their classmates and loads of laughs!

Instructor

Joey Lucius has been a performer since 2004. He joined Edmonton's Rapid Fire Theatre in 2007 and is now a touring member of their senior ensemble. Improv has taken Joey all over the continent from Portland to Atlanta and even Winnipeg! He is a Canadian Comedy Award winner and a Canadian Screen Award-nominated actor.

22-A17 Fun With A Pencil

Relax and draw along with cartoonist Gary Delainey as he guides you through the creation of cartoon characters and pictures. Along with the fun of creating your own cartoons, each lesson serves as an introduction to important elements of drawing, design or technique common to all art. This class is open to all who want to enjoy drawing, regardless of confidence or experience.

Instructor

Gary Delainey is an artist, cartoonist, writer and teacher. With Gerry Rasmussen, Gary has produced the syndicated daily comic strip *Betty* since 1991. *Betty* is published locally in the Edmonton Journal. This will be Gary's fourth time teaching at ELLA.

22-A18 Pastel (Chalk) Landscapes

Through step-by-step instruction enjoy learning the ins and outs of working with pastel. Working from photos, we will begin with simple stages of drawing then add colour. A variety of Alberta landscapes will be explored including prairie, mountains, rivers and trees.

Instructor

David Shkolny grew up in Fort Saskatchewan, Alberta. He has a Bachelor of Fine Arts degree from the Nova Scotia College of Art and Design (1992). He has been teaching painting and drawing since 2001. David's artwork is in collections across Europe and North America and at the Canada Council. Recent public commissions include a painting for Fort Saskatchewan City Hall and a pastel for the Kaye Edmonton Clinic.

22-A19 Painting Landscapes from Around the World with Watercolours

Learn all the techniques you need to know while exploring some of the iconic landscapes from around the world. Enjoy the expert guidance of your instructor as he presents projects using a step-by-step technique that will have you mastering this exciting medium. Selected projects include dramatic scenes from Europe, ancient buildings from Asia, lush green rain forests from South America, and crystal glaciers from the Arctic. Demonstrations will show participants different methods of manipulating watercolours to achieve realistic landscape paintings. Now, all you have to do is sign up! This course is for beginners and experienced students.

Instructor

Frank Haddock is a versatile artist who works in any medium and currently focuses on watercolour. His works are characteristically illuminated by a strong light source that gives his art "an inner life and energy". Frank's artwork often focuses on human and animal forms upon which he arranges a cascade of light that produces interesting arrangements of shapes and colours. The result is a character study that has the spontaneous spirit of a moment caught in time. His work has been seen in "Galleries West Magazine", "Edmonton Women's Magazine", and "Watercolour Artist Magazine" (June 2009). Frank received his BFA at the University of Alberta in 1984. Frank operates his own art school (The ARTRA Art School) and has been teaching for more than 20 years at Grant MacEwan University and several other cultural centres in Alberta. His work is shown throughout Western Canada and is represented in numerous private and public collections, including the Alberta Foundation for the Arts. One of his watercolours was included in the Canadian Society of Painters in Watercolour exhibition that appeared at the Art Gallery of Greater Victoria several years ago.

22-A20 Introduction to Watercolour Pencils

Do you have a set of watercolour pencils, but you're not sure what to do with them? Whether you're new to the medium, or would like more of an opportunity to play, bring your water-soluble pencils to class and see the beautiful effects you can achieve with them. You will learn a variety of drawing and painting techniques while experimenting with colour, line, texture and washes to create a variety of small paintings. Students will have the option to trace the initial image so they can move directly into using their watercolour pencils. Working from photos provided by the instructor, you will learn through demonstrations and individual guidance.

Instructor

Susan Casault is a professional artist who lives on an acreage south of Spruce Grove. A graduate from Alberta University of the Arts, she has always had a love of drawing, with graphite and coloured pencil being her focus in recent years. Her favourite subjects include portraiture, nature studies and prairie scenes. Susan has over 13 years of teaching experience.

22-A21 Abstract Painting 2

This course is meant for all learning levels and styles. No prerequisites required. Explore the innovations in abstraction that occurred in the second half of the 20th century to the present and examine how social movements, changing philosophies and the internet have influenced abstract art. Gain a deeper understanding of how and why contemporary artists make abstract works, with a focus on female painters. Experiment with other artists' processes, and discuss how to effectively use colour, line and texture to enhance rhythm and mood. Each class will include live demonstrations, videos and discussion regarding works created in class. Each student will be given weekly handouts.

Instructor

Samantha Walrod (University of Alberta MFA '13) is a collage artist, painter and educator living in Edmonton, Alberta. Her work can be found in collections across Canada, including the AFA Collection.

Walrod is best known for her figurative or still life collages, which are depictions of animal/human encounters or wilting flowers. Each body of work speaks to hope, loss, decay and the passage of time. In response to the ubiquity of digital imagery, tactility is very important to the artist's practice. Images are

incorporated with collage and digital technologies, while maintaining the exploration of paint.

This course is for beginners and it will teach the student how to see, how to shade and embellish with watercolour. Brief introduction to page layout and design will be taught. The main medium will be permanent ink, water-soluble ink, toned paper, and watercolour. A variety of subjects will be covered.

22-A22 Luminous Still Life (CANCELED)

Emotion is the key to a successful painting. You want your paintings to be a form of visual poetry, rather than a simple observation of the subject. You want your viewers to experience your emotional response to the subject. There are several brush techniques that can help you to achieve those goals. In this class Oksana Zhelisko will show you how to turn ordinary still-life objects into a luminous life story by using different brush techniques and by choosing vibrant transparent and opaque colours. You will create 6-8 small still-lifes from the objects you bring. Your instructor will assist you in composing your work and show you how to bring new liveliness to your painting. Life should be Luminous, so let's have some fun! Think about your paintings as possible gifts for loved ones! This course is for beginners and experienced students.

Instructor

Oksana Zhelisko is a classically trained, experimental portrait painter. Her specialty is portraits in oils, and she incorporates mixed media techniques or abstract methods into her work to enhance the tone of the subjects she selects. Oksana brings her training, skill, and passion to her painting and she is versatile in expressive styles. She is adept at many other genres, including still life and landscape. She studied in her hometown of Lviv, Ukraine at the Lviv State College of Decorative & Applied Arts before moving to Edmonton. Oksana works regularly on commissions and teaches art classes to aspiring oil/acrylic painters across Canada.