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THE STATE UNIVERSITY OF NEW YORK
Potsdam

Course Descriptions Spring 2022

SOAR

lifelong learning in the North Country

affiliated with:

ROAD SCHOLAR
Institute Network

Note from Chair, Lyn Swafford

Welcome to the Spring 2022 semester of SOAR courses! The Board of Directors is excited to return to a mixture of in-person and Zoom classes this semester, fully aware that things could change at any time. Nevertheless, we are ready to begin working our way back to where we used to be. Join us!

SUNY Potsdam and SLU require that we follow **specific conditions**, and we have agreed to accept them. **Everyone attending in-person classes must show proof of vaccination against COVID-19**; there are no exceptions. **Masks** must be worn over the nose and mouth during in-person classes. Reduced class size will allow for **social distancing** in the classrooms. Please make each volunteer ambassador's job easy by cooperating fully on these requirements.

For at least one more semester, we offer all courses, with **no membership fee**, to family, friends and other members of our community. You may register for as many courses as you would like. Zoom courses will not be recorded, so register for any Zoom classes that interest you. The Registration Team will do its best to accommodate all registrants.

Again, we ask for your understanding as we follow protocols put in place by our sponsor.

The SOAR Board of Directors, working as a team, has put together an interesting array of classes once again. We hope that you'll find several that will whet your learning appetite and that will keep you SOARING in the way that works best for you!

Lyn

REGISTERING FOR SOAR SPRING 2022 COURSES

You must register before you may attend in-person classes and/or receive an "invitation" to the zoom classes. Class sizes have been reduced (compared to pre-COVID semesters) to maintain social distancing. To help prevent being wait listed for a course, consider registering sooner than later.

Register on-line

Members are encouraged to register for courses by using the **online registration** form by clicking on the link in the instructions that follow on the next page.

Or in-person

If you prefer to **register in person**, the SOAR office will be open for 5 days ONLY, February 14 - 18 from 11:00-2:00 for registration. Please **wear a mask** and bring your **proof of vaccination**. Parking passes will be available for registered members in the office during the SOAR office hours.

When you come to class, you will be asked to show your proof of vaccination, which can be your vaccination card, a picture of it, or your NYS Excelsior Pass Plus app on your phone.

If you have any questions concerning the registration process, please email the Registration Committee at soarregister@gmail.com. We encourage you to consult the SOAR website <https://www.soarnorthcountry.com/> for the latest course updates/changes.

HOW TO REGISTER ONLINE FOR SPRING 2022 COURSES

Please click on the following link <https://forms.gle/mqQ8LYviA8izaS8g7> to go to the online registration form, or type it into your browser.

To complete the registration form:

1. Fill in the required fields: **name, email address, mailing address, preferred phone number.**
2. Please check the box that describes your vaccination status. **You will need to be fully vaccinated against COVID as per the CDC guidelines to attend in-person classes.** Click here <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html> to view the CDC guidelines.
3. Click on the “YES” check box under the titles of the courses you would like to take.
4. When you have completed your course selections, click on “**Submit**”, at the bottom. Your choices will be sent to the Registration Committee who will then register you. You will receive a confirmation email listing the courses you are in and a PDF of the parking permit for you to print and hang on your rearview mirror.
5. After you “Submit” your registration request, a web page that allows you to submit another response will be displayed. **This is only necessary if you wish to immediately add more courses.**
6. If you wish to drop a course, please email the Registration Committee at <mailto:soarregister@gmail.com> as soon as possible, so we can add a member from the course’s wait list.

Spring 2022 Courses

01 Introduction to Zoom 1—One on One

Presenter: Janet van Weringh

Zoom only

Classes: 1 session, 1.5 hours

Dates: To Be Arranged Individually

Description: A one-on-one discussion and introduction to using Zoom. We will start with a phone call from Janet to set a time and then meet on Zoom. The goal is to have you feel comfortable attending a SOAR class.

Presenter’s Background: Janet worked in the IT Departments at Clarkson University and SUNY Potsdam before retiring and joining SOAR shortly afterwards. She is Vice-Chair of the SOAR Board and is a member of the Tech Committee. When SOAR was forced to cancel in-person classes, she learned Zoom and helped to organize the Fall 2020 Zoom classes.

Other Information: Participants will receive a phone call from Janet van Weringh a few days after registering for this course.

02 Bay of Pigs Child

Presenter: Maria Pedroso-Parker

Location: Maxcy 104, SUNY-Potsdam

Classes: 1 session, 1.5 hours

Date: Friday, 4/22, 2-3:30 **Cap:** 30

Description: A Cuban child with a Family History from the Bay of Pigs

Presenter’s Background: Teacher, Translator, Remington Museum Guest Speaker, Peter Pan Child, United Nations Day speaker about the Rights of Children

03 Beginning Tai Chi and Qigong

Presenter: Pam March

Location: Maxcy Dance Studio, SUNY-Potsdam

Classes: 9 sessions, 1 hour

Dates: Tuesdays, 3/8-5/3, 12-12:55 **Cap:**25

Description: This class includes basic Chinese warmups both standing and sitting down, Tai Chi meditation and introduction to the Yang 24 movement short form. Concerns of seniors will be addressed, including balance, leg strength, endurance, relaxing and taking it easy on the joints, and learning how to relax.

Presenter's Background: Pam is a certified Tai Chi instructor from the Boston Institute of Kung Fu and Tai Chi. In Fall 2010, Pam received the Leon LeBeau SOARing Educator award in honor of the exceptional and long-lasting impact she has had on the well-being of SOAR members.

Other information: Participants should wear loose fitting clothing, soft shoes and socks. Beginning students may not register for "Continuing Tai Chi and Qigong" unless the instructor allows it.

04 Continuing Tai Chi and Qigong

Presenter: Pam March

Location: Maxcy Dance Studio, SUNY-Potsdam

Classes: 18 sessions, 1.25 hours

Dates: Tuesdays & Thursdays 3/8-5/5, 1-2:15 **Cap:**25

Description: This course is intended for students who already have familiarity with Tai Chi and Qigong. The course includes Qigong forms, traditional Chinese warmup exercises, Tai Chi meditation, and movement phrases from the short form.

Presenter's Background: Pam is a certified Tai Chi instructor from the Boston Institute of Kung Fu and Tai Chi. In Fall 2010, Pam received the Leon LeBeau SOARing Educator award in honor of the exceptional and long-lasting impact she has had on the well-being of SOAR members.

Other information: Participants should wear loose fitting clothing, soft shoes and socks and bring a water bottle.

05 Stretching for Couch Potatoes

Presenter: Pam March

Location: Maxcy Dance Studio, SUNY Potsdam

Classes: 9 sessions, 1 hour

Dates: Tuesdays, 3/8-5/3, 11-11:55 **Cap:**25

Description: Mild to almost moderate level exercises sitting on, standing beside, and using a chair to stretch. Includes learning to stretch correctly, breathe fully, body awareness, pain reduction, relaxation techniques, brief meditating, and moving cans around.

Presenter's Background: Pam is a certified Tai Chi instructor from the Boston Institute of Kung Fu and Tai Chi. In Fall 2010, Pam received the Leon LeBeau SOARing Educator award in honor of the exceptional and long-lasting impact she has had on the well-being of SOAR members.

Other Information: Bring two soup cans or light weights, and a bottle of water. Wear warm, loose fitting clothing and socks (no shoes).

06 Stretching on a Mat

Presenter: Pam March

Location: Maxcy Dance Studio, SUNY Potsdam

Classes: 9 sessions, 1 hour

Dates: Thursdays, 3/10-5/5, 12-12:55 **Cap:**25

Description: Moderate stretches lying down, sitting, and sometimes standing on a mat. Includes breathing correctly for maximum stretch with minimum wear and tear, relaxation techniques, brief meditating, and wiggling. Requirements: 1. the ability to get up off the floor (if not, then take the "Stretching for Couch Potatoes" class), and 2. walking up the stairs to class (without taking the elevator).

Presenter's Background: Pam is a certified Tai Chi instructor from the Boston Institute of Kung Fu and Tai Chi. In Fall 2010, Pam received the Leon LeBeau SOARing Educator award in honor of the exceptional and long-lasting impact she has had on the well-being of SOAR members.

Other information: Participants should wear loose fitting clothing, soft shoes and socks and bring a water bottle.

07 Brief History of Akwesasne

Presenter: Phillip White-Cree

Location: Maxcy 104, SUNY-Potsdam

Classes: 2 sessions, 1.5 hours

Dates: Fridays, 4/1 & 4/8, 2-3:30 **Cap:** 30

Description: An overview of the Indigenous History of Akwesasne, from pre-Contact to Current. This course will provide background and insight into the local Indigenous community and its impact to the region.

Presenter's Background: White-Cree is a life-long resident of Akwesasne and is a community engaged individual. He has worked over 8 years in the Aboriginal Rights and Research Office on land claim files and most recently has been teaching Indigenous History at Clarkson University. He is the Coordinator of Indigenous Community Support and Outreach within the Chief Inclusion Office at Clarkson University.

Other information: <http://www.akwesasne.ca/>, <https://www.srmt-nsn.gov/>, <http://www.mohawknation.org/>

08 Current Advances in Prosthetic Limb Development

Presenter: Kevin Fite

Location: Maxcy 104, SUNY Potsdam

Classes: 1 session, 1.5 hours

Date: Monday, 3/28, 10-11:30 **Cap:** 30

Description: This course will survey the state of the art in upper-extremity and lower-extremity prosthetic limb systems. Specific topics to be covered include the major design considerations in prosthetic limb development, the current advances in upper- and lower-extremity limb technology, and the technical challenges still to be solved in order to realize anthropomorphic prosthetic-limb function.

Presenter's Background: Kevin Fite received his Ph.D., M.S., and B.E. in mechanical engineering in 2002, 1999, and 1997, respectively from Vanderbilt University. He joined the Department of Mechanical Engineering at Clarkson University in 2007 and is currently an Associate Professor. His research interests include the design and control of electromechanical and fluid power systems with emphasis on applications in rehabilitation engineering and assistive technology.

09 Drinking Water Treatment

Presenter: , Siwen Wang

Location: Maxcy 104, SUNY Potsdam

Classes: 1 session, 1.5 hours

Dates: Monday, 5/2, 10-11:30 **Cap:** 30

Description: This course will introduce drinking water treatment processes and promote public awareness on water sanitation and hygiene. Lecture and discussion.

Presenter's Background: Dr. Siwen Wang received her PhD in Environmental Science and Engineering from California Institute of Technology and M.S. and B.S. from Tsinghua University (China). She is currently an Assistant Professor in the Department of Civil and Environmental Engineering at Clarkson University. Her research interests are treatment and detection of waterborne pathogens.

10 Emerging Learning Technologies

Presenter: Anthony Betrus

Location: Satterlee 312, SUNY Potsdam

Classes: 1 session, 1.5 hours

Dates: Tuesday, 3/22, 10-11:30 **Cap:** 10

Description: I will present a crash course in next generation Virtual Reality. We will explore Google Earth, the International Space Station, and Virtual Tourism.

Presenter's Background: Professor of Educational Technology and Management at SUNY Potsdam.

Other information: <https://allvirtualreality.com/review/best-vr-apps-senior-citizens-elderly.html>

11 Exploring Carrots: Harness the Flavor!

Presenter: M. Flip Filippi

Zoom only

Classes: 1 session, 1.5 hours

Date: Thursday, 3/31, 1-2:30

Cap: 40

Description: What grows well in our North Country summers and lasts all winter? Carrots and other root vegetables! In this class we'll dive into the carrot, learning about its history, cultivation and tasty ways to prepare it including raw, cooked and fermented. This is a live online demonstration and class participants will see the dishes being made and get the recipes to enjoy in their own kitchens.

Presenter's Background: The instructor for this demonstration is Flip Filippi, Local Food Program Leader at Cornell Cooperative Extension of St. Lawrence County and co-owner of the community farm littleGrasse Foodworks. At their farm they grow a rainbow of carrots throughout the season and store hundreds of pounds of root vegetables in their passively cooled root cellar. The class will be filmed live from the Harvest Kitchen at the Extension Learning Farm.

12 The Fiction of Colson Whitehead

Presenter: Derek Maus

Location: Maxcy 104, SUNY Potsdam

Classes: 1 session, 1.5 hours

Date: Wednesday, 4/20, 10-11:30

Cap: 30

Description: Having won the Pulitzer Prize for fiction for two of his recent novels -- *The Underground Railroad* (2016) and *The Nickel Boys* (2019) -- Colson Whitehead has taken a place among the most popular and most critically acclaimed living American authors. Over the course of a career spanning three decades and ten books, Whitehead has consistently varied the genre of his writing from book to book in order to challenge his readers not to fall into formulaic habits of reading (and thinking). This course will offer an overview of Whitehead's career with some particular suggestions for how to move through his diverse and rich body of writing.

Presenter's Background: Derek C. Maus is Professor of English and Communication at SUNY Potsdam, where he has worked since 2001. He teaches mostly courses in contemporary literature, particularly on fiction written since the turn of the millennium. He has published twelve books and has three more on the way over the next few years (assuming he can ever find the time to work on them with an energetic and talkative toddler at home...).

Other information: I have a PDF of a biographical sketch about Whitehead that I will share a week or two in advance via email.

13 Firefighter Exoskeleton Suits

Presenter: Michael Bazzocchi

Location: Maxcy 104, SUNY Potsdam

Classes: 1 session, 1.5 hours

Date: Wednesday 5/4, 10-11:30

Cap: 30

Description: This project investigates adoption and perception of automated, adaptive, and intelligent firefighter exoskeleton suits by career and volunteer firefighters in order to mitigate injury, increase workplace safety, and address challenges experienced by underrepresented groups, such as women in firefighting. Given that the role of firefighters is critical and that nearly two-thirds of all firefighters are volunteers, it is essential to increase longevity and retention of firefighters, especially in ageing rural communities. To improve safety and inclusivity in firefighting, the team is designing a novel exoskeleton suit that is personalized to a broad range of firefighters by studying how firefighters from various backgrounds perform tasks and how they may be equipped with knowledge of the environment through intelligent sensing. Lecture and discussion.

Presenter's Background: Dr. Michael C.F. Bazzocchi is an Assistant Professor at Clarkson University and Director of the Astronautics and Robotics Laboratory (ASTRO Lab). Previously, Dr. Bazzocchi held positions at the University of Toronto (Canada) in Mechanical & Industrial Engineering, the Institute for Robotics and Mechatronics, the Toronto Institute of Advanced Manufacturing, and the Institute for Aerospace Studies. He was a researcher in Onboard Space Systems at Luleå University of Technology (Sweden). Dr. Bazzocchi also worked for the RHEA Group as a spacecraft concurrent design engineer on the Canadian Space Agency satCODE (satellite concurrent design) project.

14 Lighten Up: Understanding the Legalization of Cannabis for the New York Consumer

Presenter: Ann McLaughlin

Location: Maxcy 104, SUNY Potsdam

Classes: 1 session, 1.5 hours

Date: Monday, 4/11, 10-11:30

Cap: 30

Description: With the legalization of cannabis in March 2021, New York State will soon open retail markets for cannabis products. This course will give participants a chance to learn about what may be available for purchase in cannabis retail shops and what one needs to know in order for these products to be consumed safely.

Presenter's Background: Ann McLaughlin is a Certified Cannabis Patient Caregiver through Americans for Safe Access, a NYS Medical Marijuana Patient, and a consumer advocate for this emerging industry.

Other Information: Participants may want to read "Smoke Signals: A Social History of Marijuana - Medical, Recreational, and Scientific" by Martin A. Lee prior to taking the class. This is not a requirement.

15 Memory Lane

Presenter: Heather Beauchamp

Location: Maxcy 104, SUNY Potsdam

Classes: 1 session, 1.5 hours

Date: Friday, 3/25, 10-11:30

Cap: 30

Description: This course will explore various types of memory, age-related changes associated with memory, and some strategies/tips to enhance memory.

Presenter's Background: I teach Human Learning & Memory and Cognitive Psychology at SUNY Potsdam, and my research interests in this area include memory errors and false memories.

16 Mysterious, Tranquil and Ancient: Fishless Bog Lakes of the Adirondacks

Presenter: Bradley Baldwin

Location: Johnson Hall 112, SLU

Classes: 1 session, 1.5 hours

Date: Thursday, 3/10, 10-11:30

Cap: 20

Description: Can these small, beautiful and weird lakes be windows to the past, showing us what primordial lakes were like before the evolution of fish? Bogs dot the Adirondack park and are fun, squishy places in which you can explore unusual vegetation (sphagnum moss, pitcher plants, sundew). And if that wasn't entertaining enough, small lakes within many bogs defy textbook explanations of the "normal" ecology of neighboring lakes we commonly paddle and explore. Lakes without fish? Lakes with plentiful creatures that tolerate high acidity? Critters that seem to "suntan" during the year? What's going on here?? Come find out!

Presenters' Background: Brad has explored north country waters for decades, from the Great Lakes to the St. Lawrence River to the lakes and rivers of the Adirondacks. He teaches St. Lawrence University classes on Ecology as well as Food Production and Health.

17 Polystyrene Pollution

Presenters: Lauren Eggleston and Chelsea Broughton

Location: Maxcy 104, SUNY Potsdam

Classes: 1 session, 1.5 hours

Date: Friday, 4/29, 2-3:30

Cap: 30

Description: Polystyrene is one of the most commonly used plastics, and is listed as non-biodegradable. As trash, it accumulates in our waterways. What are we doing about it?

In this course, we will discuss how polystyrene is used and what perils it causes as it breaks down into microplastic. We'll learn more about this type of plastic, discuss local legislation efforts, and explore current scientific research.

Presenter's Background: Lauren Eggleston is Program Manager at Save the River. She holds an MSc from the University of Alberta in Structural Geology (and she went to SUNY Potsdam!). She loves teaching about the St. Lawrence River and the Great Lakes. Chelsea Broughton is Education coordinator at Save the River. She's wrapping up a six-month internship with the organization, and enjoys the days of field work the most.

18 Postwar German Cinema

Presenter: Brook Henkel

Location: Carnegie Hall 10, SLU

Classes: 2 sessions, 1.5 hours

Dates: Thursdays, 4/14 & 4/21, 10-11:30 **Cap:** 20

Description: We will watch and study the classic postwar German "rubble film" titled "The Murderers Are Among Us" (1946), directed by Wolfgang Staudte. We will analyze the film as a representation of Germany's Nazi past, its immediate postwar reconstruction, and the lingering traumas of WWII.

Presenter's Background: Associate Professor of German and Film Studies at St. Lawrence University

19 Seeing the Invisible: A Closer Look at Gender Bias

Presenter: Amber Stephenson

Location: Maxcy 104, SUNY Potsdam

Classes: 1 session, 1.5 hours

Date: Wednesday, 3/30, 10-11:30 **Cap:** 30

Description: In this course, participants will learn about the 15 gender bias factor model identified through Dr. Stephenson's research. In a casual and conversational environment, participants will engage in discussion and learn how such biases are omnipresent and can manifest in a multitude of unexpected ways.

Presenter's Background: Dr. Amber Stephenson is an Associate Professor in the David D. Reh School of Business at Clarkson University. Her research areas include identification, or the propensity of an individual to define the self in terms of an organization, profession, or brand as well as how women leaders experience gender bias. She presently has more than 20 peer-reviewed journal publications and has presented her research nationally and internationally. Most recently, she was invited to present for the US Department of State's International Visitor Leadership Program and the launch of the University College London's Global Business School for Health—both on topics of gender equity.

20 Stem Cells: A Historical Perspective and Future in Healthcare

Presenter: Bethany Almeida

Location: Maxcy 104, SUNY Potsdam

Classes: 1 session, 1.5 hours

Date: Monday, 4/4, 10-11:30 **Cap:** 30

Description: In this course, we will discuss stem cells and their historical use in science, healthcare, and medicine as well as how stem cells are currently being used and their future potential. We will additionally discuss their societal implications, including ethical considerations.

Presenter's Background: Dr. Almeida is an Assistant Professor in the Department of Chemical and Biomolecular Engineering at Clarkson University. Her research is in the fabrication of biomaterials to modulate stem cell behavior. Prior to joining Clarkson, Dr. Almeida was a postdoctoral researcher at the US Naval Research Institute, and she received her Ph.D. in Biomedical Engineering from Brown University.

21 Tang Dynasty Tales

Presenter: Zhenjun Zhang

Zoom only

Classes: 1 session, 1.5 hours

Date: Friday, 4/15, 7-8:30 PM **Cap:** 30

Description: Briefly introduce Tang tales—one of the two wonders of the dynasty—their format, content, place in the history of Chinese fiction, and the works available in English. We will discuss some famous pieces with students.

Presenter's Background: MA from Peking University, PhD from UW-Madison, author and translator of quite a few books, majoring in pre-modern Chinese literature.

22 The Clinical Relevance of Opioid Pharmacology

Presenter: Damien Samways

Location: Maxcy 104, SUNY Potsdam

Classes: 1 session, 1.5 hours

Dates: Wednesday, 3/16, 10-11:30 **Cap:** 30

Description: While opioids remain a frontline treatment for pain, their addiction potential remains a considerable liability to their clinical use. Last year alone there were 60,000 deaths due to fatal opioid-induced respiratory depression. In this course, participants will learn how opioids interact with the nervous system to relieve pain, inhibit normal breathing, and stimulate reward pathways associated with opioid use disorder.

Presenter's Background: I received a Ph.D in pharmacology from the University of Bristol, UK, on the subject of opioid receptor signaling. Currently an associate professor in the Department of Biology at Clarkson University, I teach pharmacology, anatomy and physiology, and neurobiology. My current research interest lies in the pharmacologically relevant cell signalling mechanisms of cancer cells.

Other information: Participants encouraged to bring their cell phones or tablet devices. I will be using some interactive apps available on my website: <https://subcellularbizniz.com/>

23 Using Mathematics to Understand Invasive Species' Growth, Spread, and Control

Presenter: Diana White

Location: Maxcy 104, SUNY Potsdam

Classes: 1 session, 1.5 hours

Dates: Friday, 3/18, 3-4:30 **Cap:** 30

Description: I will present on new work I've completed to understand the growth, spread and control of the invasive aquatic plant, Eurasian Watermilfoil. This plant is in our backyard, spreading quickly through most local lakes and rivers in Upstate NY (including the impoundments along the Raquette). I will discuss field work completed by my Clarkson team to understand the plant's growth characteristics in addition to math models, which we use to predict how the plant will spread in a lake in future seasons. I'll also describe how predictive models can also be used to understand the efficacy of biocontrol (a native water beetle called a weevil) at reducing Eurasian Watermilfoil in our local lakes and also work I've done applying such models to lakes in Upstate NY.

Presenter's Background: Diana White is an Applied Mathematician who uses math to understand complex biological problems. She loves using math to explore problems in cell biology, cancer biology, and ecology.

24 Vegetable Gardening Basics part I and II

Presenter: Erica LaFountain

Zoom only

Classes: 2 classes, 1.5 hours

Dates: Wednesdays, 3/16 & 3/23, 1-2:30

Description: In this two-part course, we will cover gardening basics: planning your garden, preparing the soil, seeding and transplanting, and caring for your plants (watering, weeding, and controlling pests). We will delve into container gardening and raised beds. We will have time for questions, and participants will learn how to get their gardening questions answered beyond the class using the county's "Growline."

Presenter's Background: Erica LaFountain is Community Horticulture Educator and Master Gardener Coordinator for St. Lawrence County. She has a background in organic vegetable farming, gardening, and orcharding and has a homestead in Potsdam, NY.

25 Advanced Gardening Topics part I and II

Presenter: Erica LaFountain

Zoom only

Classes: 2 sessions, 1.5 hours

Date: Wednesdays, 4/27 & 5/4, 1-2:30

Description: In this two-part course, we will cover many ways to take your vegetable garden to the next level: soil testing and amending, growing seedlings indoors, succession planting, seed saving, crop rotation, intercropping, cover cropping, season extension, composting, and gardening for pollinators. Many of these can be applied to ornamental gardens as well. We will have time for questions, and participants will learn how to get their gardening questions answered beyond the class using the county's "Growline."

Presenter's Background: Erica LaFountain is Community Horticulture Educator and Master Gardener Coordinator for St. Lawrence County. She has a background in organic vegetable farming, gardening, and orcharding and has a homestead in Potsdam, NY.

26 Wearable Sensors for Healthcare

Presenter: Silvana Andreescu and Mohamed Hassan

Location: Maxcy 104, SUNY Potsdam

Classes: 1 session, 1 hour

Date: Friday, 5/6, 3-4:00

Cap: 30

Description: The course will introduce the audience to recent advances in the development of sensing technologies for remote monitoring of health conditions. Fabrication and application of sensors that detect biomarkers such as glucose, lactate, glutamate, uric acid and cholesterol levels non-invasively will be discussed with examples of applications. These sensors present exciting opportunities to measure physiologic parameters in a continuous, real-time and non-intrusive manner. Successful development and implementation of these devices into the mainstream healthcare system will enable patients and physicians to efficiently monitor health conditions and tailor treatment plans to maximize efficacy, diagnose and monitor diseases.

Presenter's Background: Silvana Andreescu is the Egon Matijević Endowed Chair in Chemistry in the Department of Chemistry and Biomolecular Science at Clarkson University in Potsdam, NY. She has received a PhD in Chemistry, specializing in biosensors from the University of Perpignan, France, and University of Bucharest, Romania in 2002. Between 2003 and 2005 she was a NSF-NATO postdoctoral fellow at the State University of New York at Binghamton. Her work on sensing has been featured broadly by the American Chemical Society (ACS), the American Food Summit and the Institute for Food Technology (IFT), the largest international organization in the world focusing on food science and technology. She has published over 180 peer-reviewed publications, co-edited 3 books, was awarded three patents and has delivered some 200 presentations throughout the world. Mohamed H. Hassan is a PhD candidate in the department of chemistry and biomolecular science at Clarkson University. He received his MSc in chemistry from Alexandria University, Egypt. His research interests include synthesis of porous materials and functional nanomaterials for applications related to chemical and wearable sensors.

27 Who Really Wrote Shakespeare? The Holy Trinity Decryption

Presenters: Jake Roberts

Zoom only

Classes: 2 sessions, 1.5 hours

Dates: Mondays, 3/14 & 3/21, 3-4:30

Description: This course explains some of the hidden messages appearing encrypted within the plaque adorning William Shakespeare's Funerary Monument in Holy Trinity Church, Stratford-upon-Avon. Among the messages appearing in cipher form are the name of the true writer of the works of Shakespeare, and the identity of his royal parents.

Presenters' Background: The presenter has been an English teacher for nearly 30 years and is an amateur cryptanalyst. Spending the last two years decrypting what is commonly referred to as "Shakespeare's Plaque" has resulted in publishing his findings in his book *The Holy Trinity Decryption*. Additionally, Roberts has presented his findings with treasure hunters Rick and Marty Lagina, who appear on the History Channel's "The Curse of Oak Island."

Other Information: <https://www.theghostsofbacon.com/>
<https://www.history.com/shows/the-curse-of-oak-island>

28 Zooming to a Good Night's Sleep

Presenter: Serge Onyper

Location: Valentine Hall 104, SLU

Classes: 1 session, 1.5 hours

Date: Friday, 3/11, 3-4:30

Cap: 30

Description: In this interactive lecture, we will consider the following questions: How much sleep do we need? What determines when we sleep? Why do we need to sleep? How well can we function with little to no sleep? And what does technology, particularly video calls, do to our sleep?

Presenter's Background: I've been a faculty member in the psychology department at St. Lawrence University since 2007. I teach courses in psychology and neuroscience, as well as in the first-year program, and I do research on memory, learning, and sleep.

