

## **WINTER/SPRING 2024 CLASSES**

### **INSTITUTE FOR LEARNING IN RETIREMENT**

***Exciting Interactive Courses for Curious People at SaddleBrooke***

#### **FROM THE ARAB SPRING TO THE ARAB WINTER—WHAT HAPPENED?**

**FREE LECTURE – NO REGISTRATION REQUIRED – OPEN TO ALL SB RESIDENTS**

**Sandy McNabb, Thursday, 4 to 6 pm**  
**DesertView Theater: January 4th**

This presentation will look at some key moments of the Arab Spring and identify what went wrong and some lessons learned. The Arab Spring started in December 2010 when a young Tunisian fruit seller set himself on fire in front of the municipal office out of despair, hopelessness, and humiliation. And yet, the Arab Spring protests did not result in a more democratic, inclusive government. It is clear that the Arab Spring has transformed into the Arab Winter. Arab governments are now more autocratic than ever, often with the consent of the people. But were these protests all in vain?

#### **24-101 MEDICAL DISCOVERIES AND INNOVATIONS THAT PROMISE TO IMPROVE HEALTHCARE (NEW)**

**Ken Marich, Mondays, 10:00 am to noon**  
**Sonoran Room: January 8, 15, 22, 29, February 5, 12 (six sessions)**

Join us for an exciting series of lectures on medical discoveries and innovations. You will hear from 6 experts in their fields as they share their knowledge and expertise about promising breakthroughs in the field of medicine.

In Session 1 Dr. Loyal Tillotson (Internal Medicine) will provide a scientific look at the origin of Covid-19. In Session 2 Dr. Lockwood Carlson (physicist) will lecture on “Understanding Nanotechnology and its Future Medical Applications”. In Session 3 Ken Marich (biophysicist) will talk about “Improved Diagnostic Medical Ultrasound Techniques and New Therapeutic Applications for Noninvasive Surgery Using Acoustic Ablation”. In Session 4 Dr. Tillotson will be back to talk about how Nobel Prize Research leads to significant advances in medicine. Then in Session 5 we will be joined by neurologist Dr. Carol Henricks to learn about the therapeutic role of hyperbaric oxygen therapy (HBOT) and pulsed electromagnetic field therapy (PEMF). Finally in Session 6 we will hear from two cardiologists. Dr. Art Triester will talk about the early history and technological advances in the field of cardiology. Then Dr. Joseph Alpert (U of A Cardiologist) will discuss geriatric cardiology and preventive cardiovascular health.

#### **24-102 DISCRIMINATION: AMERICAN HISTORY, LAW, AND ETHICS (REPEAT)**

**Paul Frederickson, Tuesdays, 10:00 am – noon**  
**Sonoran Room: January 9, 16, 23, 30, February 6, 13 (six sessions)**

This course will review the long history of discrimination in America. It will consider the ethics for discerning unjust discrimination and examine the case law and statutory law that has evolved to combat discrimination. The focus will be on race and gender discrimination. Other categories, such as religious and disability discrimination, will also be covered. Topics will include discrimination in employment, education, athletics, property, voting, marriage, and access to private clubs and business services. Controversial topics such as affirmative action, sexual harassment, and LGBTQ+ discrimination will also be covered. The course will rely on the disciplines of history, law, and ethics to build appreciation and understanding for our societal responses to discrimination in America.

## **24-103 A HISTORY OF CESSNA AIRCRAFT AND THE CESSNA AIRCRAFT COMPANY (NEW)**

**Chuck Stump, Wednesdays, 10:00 am to noon**  
**Cactus Room: January 10, 17, 24, 31, February 7 (five sessions)**

This course will trace the creation of the most prolific general aviation aircraft company in U.S. history, from the birth of Clyde Vernon Cessna in 1879, to the creation of the Cessna Aircraft Company in 1927, through the history of the Cessna Aircraft Company to present day achievements in the aviation world.

From Clyde Cessna's early life as the son of a Kansas farmer, to his job as a car salesman and his first airplane named Silverwings, to his joint venture with Walter Beech, and Lloyd Stearman, and eventually the creation of the Cessna Aircraft Company, the course will examine the trials and tribulations, and successes and honors that have made the company what it is today—an international leader in the world of aircraft development and production.

## **24-104 MAGNETISM AND MAGNETIC MATERIALS IN THE MODERN WORLD (NEW)**

**William Soffa, Wednesdays, 2:00 pm – 4:00 pm**  
**Cactus Room: January 10, 17, 24, 31, February 7, 14 (six sessions)**

Magnetic phenomena and devices are ubiquitous in our everyday life. It has been estimated that during the course of a day we come into contact with as many as one hundred (100) magnetic-based technologies such as computers, motors, speakers, credit cards, television, etc. Magnetism in our life does more than hold notes to the refrigerator door! This lecture series will develop a basic understanding of the origin and nature of the magnetism that surrounds us, and which has emerged as an indispensable component of the modern world. Remember the earth itself is a big magnet!

## **24-105 MINERALS AND GEMS – NATURE'S TREASURES (REPEAT)**

**Harlan Clare, Thursdays, 10 am – noon**  
**Sonoran Room: January 11, 18, 25, February 1, 8, 15 (six sessions)**

Minerals and gems can be beautiful, but did you know that many of the products you use today come from common minerals? Come join us and learn about common and not so common minerals. You will participate in hands-on activities and demonstrations, while learning how and why minerals are different and how they are used. Find out how minerals can be altered to enhance their value. All of these topics will increase your appreciation of specimens while attending the largest Gem, Mineral, and Fossil Showcase in the world in Tucson, Arizona. Participants in the field trip to the show will be required to sign a waiver.

## **24-106 WHY WE ARE WHO WE ARE (NEW)**

**Louise Grabell, Fridays, 9:00 am to 11:00 am**  
**Coyote North Room: January 12, 19, 26, February 2 (four sessions)**

We all know “the life of the party”, the “introvert”, the “fuss-budget”, the “stickler”, and the “goofball”. But do we know what really makes us who we are? Do we know why we react in certain ways to specific situations? Do we know why “the apples don’t fall far from the tree”? Why are we uncomfortable with some personality types and at home with others? What does it mean to be well-adjusted? There are many factors that go into the development of one’s personality, and this course will introduce you to most of these. . . so, in the end, you should be able to figure out the mystery of why you are who you are.

## 24-107 PRE-HISPANIC CULTURES OF SOUTH AMERICA (REPEAT)

**Sharon Cotter: Mondays, 10:00 - noon**

**Sonoran Room: February 19, 26, March 4, 11, 18, 25 (six sessions)**

Many of us think we know a lot about the history of the world . . . the rise of civilization in Mesopotamia, the Romans, the Greeks, the Chinese, early India, but that is only part of the story. South America has a history that goes back at least 10,000 years and perhaps as much as 30,000 years. It is not just Machu Pichu—one of the earliest civilizations developed at around 8,000 feet! The South Americans were not defeated by the Spanish Conquistadors, but rather by the diseases they brought to the new continent. While the Amazon had over a million people when the first Spanish explorer came, by the time the conquistadors came, over 90% of the population had died from those diseases. Some of the most amazing things you will learn about this lost history is that, while they did not have a written language, the people of South America built some of the most beautiful cities in the ancient world. Their agricultural science was way ahead of most cultures up until the current era. Pottery and textiles were some of the best in the world. The architecture that was developed would withstand virtually any earthquake. There were over 24,800 miles of road created in some of the most challenging mountains in the world. The earliest mummies in South America date to 5050 B.C.E, 2000 years before the mummies in Egypt. This and many more amazing facts will be included in this fascinating course on the Pre-History of South America.

## 24-108 HISTORY OF THE BLUES - PART ONE (NEW)

**Randy Greene with guest lecturer Susan Kravitz: Tuesdays, 10:00 - noon**

**Sonoran Room: February 20, 27, March 5, 12, 19, 26 (six sessions)**

*When you're in trouble  
Blues is a man's best friend  
Blues don't know where you're going  
Blues don't care where you been  
(Otis Spann, The Blues Never Die)*

The blues is an indigenous American musical form that is powerful, influential, and has pervaded much popular music, jazz, and rock 'n roll. After defining what the blues is, this course will trace the story of the blues from its roots in post-Civil War African American culture, primarily in the South, as well as its roots in African music, through its development as a distinct musical form in the Mississippi Delta in the early 20<sup>th</sup> century. We will follow its evolution and finally its movement up North as it transforms into urban music. The influence of the blues in jazz, folk and rock will be explored. Music by representative musicians from each era will be played and discussed. Part two, to be taught in the fall of 2024, will discuss the evolution of the blues to the present as well as its influence on rock, folk, and jazz.

## 24-109 INSIDE THE ATOM - PART TWO (NEW)

**Harold Kirk: Wednesdays, 10:00 - noon**

**Cactus Room, February 21, 28, March 6, 13, 20, 27 (six sessions)**

The 20<sup>th</sup> Century has witnessed a remarkable advancement in our understanding of the physical nature of the world within the atom. In this course we will be following the trajectory of discoveries which have led to our current understanding. We begin with the discovery of radioactivity in 1896 and progress toward the celebrated 2012 discovery of the Higgs boson at the Large Hadron Collider in Cern, Switzerland. Harold Kirk has spent 45+ years in the field of particle physics culminating at the Brookhaven National Laboratory on Long Island, New York.

## **24-110 GEOLOGY OF ARIZONA LANDSCAPES (REPEAT)**

**Karen Gray: Wednesdays, 1:30 – 3:30**

**Cactus Room: Feb 21, 28, March 6, 13, 20, 27 (six sessions)**

This class will examine the geologic events and processes that form the diverse Arizona geology, including the Tucson Mountains, the Catalina Mountains, and the Grand Canyon. There will be three field trips: (1) Catalina State Park with a 2-mile round trip hike; (2) Catalina Mountains to Summerhaven (an all-day car trip with frequent stops); and (3) an all-day excursion to the Tucson Mountains with four short hikes to examine features of the volcanic range. These field trips are offered but are optional. Dates will be determined by class consensus. Participants are required to sign a waiver in order to participate in the field trips.

## **24-111 POSITIVE AND NEGATIVE AGE STEREOTYPES: THEIR IMPACT ON HOW WELL AND HOW LONG WE LIVE (NEW)**

**Marv Goldberg: Thursdays, 10:00 - noon**

**Sonoran Room, Feb 22, 29, March 7, 14, 21 (five sessions)**

Whether from mass media, social media, the medical profession or just the broader population, ageism's negative stereotypes of seniors abound (tottering, memory impaired, old geezer, etc.). The challenge is not only to go beyond discounting these generalized beliefs, but to consider, internalize, and revel in the POSITIVE aspects of growing older (wise, experienced, patient, etc.).

We'll review not only how buying into ageism's negative images (even unknowingly) can impair seniors, but just as importantly, we'll look at the many strategies/actions we can take to ensure that the *positive sides* of aging are foremost in our minds. We'll review the science and learn several practices that can lead us to happier, healthier, and longer lives.

## **24-112 TOXIC CHEMICALS IN OUR DAILY LIFE – WHAT'S SAFE, WHAT'S NOT, AND HOW DO I KNOW? (NEW)**

**David Eaton, Fridays, 10:00 – noon**

**Cactus Room, February 23, March 1, 8, 22, 29 (five sessions, no class on March 15)**

There are approximately 85,000 different chemicals in commercial use in the United States, and for the most part they have greatly improved our lives. Pharmaceuticals to treat our ailments, pesticides to eliminate pests in our home and improve our food supply, water treatment chemicals to make our drinking water safe, and natural products in our diet that can have both beneficial and harmful effects. But the widespread use of such chemicals is not without risk to our health and our environment. Environmental organizations and some governmental agencies emphasize the 'bad', whereas industry and the economy focus on the 'good'. But how does 'science' inform us? This series of lectures will focus on the basic scientific principles of 'toxicology' (the study of poisons) and 'pharmacology' (the study of chemicals with beneficial effects), using examples and controversies from our everyday lives to try to provide a balanced perspective on the risks and benefits of the use of chemicals in our daily lives. Examples will include discussion of the basic scientific principles of toxicology and pharmacology, chemicals and cancer risk, plant and animal toxins in the desert environment, and two current controversies in toxicology (cancer-causing contaminants in pharmaceuticals, fluoride in drinking water).

## **24-113 INVESTIGATING PRESIDENTIAL ELECTIONS: A SYSTEMS APPROACH (NEW)**

**Mark R. Joslyn, Fridays, 9:00 am – 11:00 am  
Coyote Room North, March 1, 8, 15 (three sessions)**

This course emphasizes the development of American presidential elections over time. Specific areas of interest include the presidential nominating process, the Electoral College, voter behavior, and various ways to predict the winner. Also, we will examine potential reforms to the electoral system. The 2024 presidential election as well as past presidential and congressional campaigns will be used to illustrate concepts and issues.