



Saturday Academy

ECHO PROGRAM | CLASS SEMINARS
at Western Reserve Academy

WRA's Saturday Academy ECHO modules are designed to extend, enrich, and support student learning in a way that would not be possible in the Monday through Friday schedule. Modules will meet under a few different formats during one of the three trimesters (fall, winter, and spring). You will see the possible formats on the next page. Students will enroll in two modules per year.

ECHO modules are academic in nature: they present clear learning objectives that echo the spirit of our Monday through Friday program. The modules provide students with the opportunity to discover a new academic passion or to pursue an area of academic aptitude in depth.

The school will list students' ECHO modules on their official transcripts, with a grade of Honors Pass, Pass, Low Pass, or Fail. Modules will require approximately one hour of preparation before each class meeting. Moreover, teachers will expect conscientious attendance, earnest effort, and productive participation.

As you will see in reading through this catalog, the offerings are diverse, reflecting the broad interests and expertise of the WRA faculty and staff. We hope that the modules enable students to experience intensive, extended, innovative, and interdisciplinary opportunities for learning.

Students will rank their preference in trimesters and choose modules for each trimester from among the many offerings. (Students will be enrolled in their top available modules for two trimesters; moreover, we will take students' athletic commitments into account when determining which trimester to leave open.) Only a few offerings have prerequisites. All ECHO modules share the purpose of enhancing the transformational experience of a WRA education.

We hope you enjoy reading through this catalog and engaging in the seventh year of this exciting program.

Class Formats

Format A:

Designated Saturdays (8:20 AM - 10:50 AM)

Format B:

Designated Friday Evenings (7:00 PM - 9:30 PM)

to take place the evening before ECHO Saturdays

Format C:

Three Extended Saturday Meetings (8:20 AM - 1:20 PM)

Chosen Saturdays Listed in Catalog

Format D:

One Extended ECHO Weekend

ECHO Weekend Listed in Catalog

Format E:

Alternative Format

Fall*A Study of Sherlock Holmes*

Donnelly, Amy

What makes a novel hard to put down? How can a short story written many years ago still keep the reader's attention? What qualities does a detective have that make him or her distinct, successful, and timeless? In this module, we will explore the qualities of the old fashioned gumshoe, specifically Sherlock Holmes, and the transformation of this iconic character throughout the years. This module will instill a love of the genre and particularly of the passionate following of this particular fictional detective.

Format: A**Special Date(s):**

Fall*Creating a 21st Century WRA Campus Tree Tour*

Spano, Jill

This module will tie in hands on science with technology. Students will learn the basics of tree identification using tree guides and dichotomous keys for leaf identification. The major objective of this module is to create a campus tree tour for anyone who visits the WRA campus. Students will use software to create map files of various tree species on campus. In addition to collecting data on native tree species on the WRA campus, students will create metal tree tags to place around campus for all visitors to enjoy.

Format: A**Special Date(s):**

Fall*Going Global: Global Goals and Local Action*

López, Julianne

Is there a new global order? How do we currently engage with others? What will the future mean in terms of citizenship and culture? This module will examine citizenship and culture conceptually and reflect on their critical role in the global context. Together we will explore definitions, evolving considerations and opposing viewpoints on what it means to belong. Throughout our time together we will develop a shared vocabulary, and deeper understanding around the importance of citizenship and culture in our globalized world. As we continue to study citizenship and culture in our globalized world, we will move from theory to action. This module will be organized primarily around the 17 Global Sustainable Development Goals that were established by the UN to make a better world by 2030. Together we will explore different vehicles to engage on the global stage such as We, ONE ,Global citizen, Change, Project Everyone, and take action.

Format: B**Special Date(s):**

Fall

Midterm Elections: Debating the Issues

Horgan, Sarah and Hoffman, Rich

Here's your chance to get political and involved in some of the most exciting midterm election races in the history of this country. Will the Republicans maintain control of the government - nationally? On the state level? Will gun control be a platform issue for candidates running for the House and Senate in the wake of the Marjory Stoneman Douglas school shooting? In more local politics, will Ohio return Brown to the Senate? Who will be Ohio's next governor? Usually midterm elections are a bit of a snore but not this year. . . The intention of this module is to allow students to explore the issues in the campaign, become familiar with the political platforms and policies of the Democratic and Republican parties, get up close and personal with the candidates for Senate, House and Governorship, hear from guest speakers about this historic election cycle, engage in political discussion and formal debates about the merits of each party's platform and the candidates' plans for making America great, spend a day volunteering for a candidate of your choice and finally organize and execute a WRA midterm mock debate in our very own chapel in front of your WRA peers followed by a mock election. Who will WRA choose???

This Fall Echo Module will follow a format of meeting on Friday evenings and we will probably have only 5 meetings but some will go a bit longer than normal when it comes time to plan our final event.

Format: B

Special Date(s):

Fall

News and Social Media: Smartphones Welcomed!

Forrer, Sarah

Where do you get your news? This module explores news and how we process it. From traditional media to social -- what sources do you rely on, trust the most and why? From editorial to advertorial, we'll explore traditional print media and television. We'll draft press releases and discuss distribution. We'll take a deep dive into social media and how it's used for marketing and sharing news. During one of our sessions, students will visit a local news station in downtown Cleveland. (This class will meet for four Fridays and one extended weekend day to visit a news station)

Format: B

Special Date(s):

Fall

Women In Business

Thews-Baldrige, Emily

The module will delve into the history of women in business, do case studies on current and past female leaders (Sheryl Sandberg, Marissa Mayer, Martha Stewart, etc.), and examine questions like "Does the glass ceiling still exist?" and "Are women expected to behave differently in the workplace, and if so, why?"

Format: B

Special Date(s):

Fall

Write ON!: An Exploration In Writing

Chlysta, Sherry

Using a variety of prompts, students will have opportunities for creative, persuasive and expressive writing. Students will have weekly writing assignments ranging from play reviews and poetry to self-descriptive pieces derived from unique prompts, including writing from different perspectives based on observation. Writers of all levels will be challenged to write clearly and concisely while allowing the reader to feel whatever the author intended.

Note: We will likely see a play on a Friday night and possibly meet on a Friday evening to accommodate student conflicts.

Format: A

Special Date(s):

Winter

Advanced Challenges in Science

Boesch, Wanda and Pethel, Beth

Students will learn several specific topics in depth in various scientific disciplines, including earth science, biology, chemistry, physics, and engineering. Based on this learning, they will undertake various challenges including hands-on challenges such as experiments, or constructing a device to follow specific parameters, or undertaking a knowledge-based challenge. The events would fall under the five umbrella categories of life, personal and social science; earth and space science; physical science and chemistry; technology and engineering; and inquiry and nature of science. This module allows students to explore diverse fields of science not typically incorporated in the curriculum at WRA.

Format: B

Special Date(s):

Winter

An Introduction to Chinese Culture: When "Hello!" Meets "Ni hao!"

Chen, Judy

This module will introduce topics on the Chinese cuisines, arts, and philosophy. Topics will include basic knowledge of Chinese cuisines, calligraphy, paper cutting, Chinese performance arts, Feng Shui, Tai Chi, Qi Gong and Meditation. This module will be taught in English. Learning materials will be provided with hands-on practice.

Format: C

Special Date(s): TBD

Winter

Boys in the Boat

Warner, Jeff

Boys in the Boat is the exploration of the 1936 Olympic gold medal-winning 8-man crew team from the USA/University of Washington. The story is another Depression-era sports story, like Seabiscuit and Unbroken, though by a different author. What makes this piece different than the other two novels is that this story emphasizes the importance of committing oneself to something greater than yourself.

Format: A

Special Date(s):

Winter

Creative Movement

Barth, Emily

Creative Movement is a dance class for students of all abilities. We will explore movement by using the elements of dance, which are body, space, time, and energy. Creative movement gives students the opportunity for creativity, self expression, problem solving, independent work, and collaboration.

Note: This module will meet for three extended Saturdays (ECHO Trimester 2 - 1, 2 - 2, and 2 - 3).

Format: C

Special Date(s): TBD TBD TBD

Winter

Eastern Philosophy and Meditation: Living Like the Dalai Lama

Robinson, Lisabeth

Students will undertake the study of Hindu, Buddhist and Taoist texts and traditions while accompanying their study with an extended meditative practice that includes examining the physiological and psychological benefits of meditation. The module aims to study the history of Eastern philosophy more deeply while examining how it is being expressed by current scholars and public figures like Thich Nhat Hanh, Pema Chodron, and of module, the Dalai Lama.G

Note: we will be attending a Sunday service at a Buddhist Temple in Richfield.

Format: A

Special Date(s):

Winter

Exploring the Harlem Renaissance

Wheeler, Brandi

In this module, students will be introduced to the Harlem Renaissance, a literary, artistic, and intellectual movement that helped to foster a new black cultural identity in the 1920s. Each week, students will be introduced to new voices and important works of the Harlem Renaissance.

Format: B

Special Date(s):

Winter

History of World War II : How and Why the World Changed as a Result of World War II

Closen, Brand

Students will study the causes, early US response and involvement, major theater campaigns, political and social impacts of the war, and how war affects individuals (both combatants and civilians) on a personal level. This will be accomplished through reading selected works, viewing film, lecture and discussion, and will include a student project involving contact with a veteran.

Format: A

Special Date(s):

Winter

Introductory Robotics

Preston, Joel

We will construct robots in teams of two students using the Lego Mindstorm set. No experience necessary. The students will build mechanisms to perform specific tasks which will be increasingly challenging. The plastic parts make construction, literally, a snap. Motors and sensors will be combined with the mechanisms and controlled using a programmable microprocessor. Object-oriented programming will be introduced and used.

Format: A

Special Date(s):

Winter

Intuitive Calculus

Manoli, Gerard

Intuitive calculus is a non algebraic approach to the study and understanding of the concepts of calculus including limits, continuity, derivatives and the definite integral. Students will learn how to use simple geometric and numerical approximation methods and techniques to demonstrate and understand the fundamental concepts of calculus. Since the approach is not algebraic, as in the formal study of calculus, any student who can calculate the slope of a line, calculate the area of a rectangle and use a graphing calculator can study calculus through this approach. (Note: this offering is for students who have completed Math 21 or its equivalent, but who have NOT yet had calculus and are not currently enrolled in a calculus module.)

Note: Students may NOT be enrolled or have taken calculus.

Format: A

Special Date(s):

Winter

Philosopher and Madman: The Life and Thought of Friedrich Nietzsche

Namiotka, Jeff

The nineteenth-century German philosopher Friedrich Nietzsche was wont to proclaim during his own lifetime that his "true readers" had not yet been born and that his greatness would not be recognized until "the day after tomorrow." The prescience of this remark is simply astonishing. We now inhabit his "day after tomorrow," and not only has his work achieved world-wide recognition and even adulation, the urgency of his message has never been more compelling than it is today. In our six weeks together, we shall

consider each of Nietzsche's major doctrines, from eternal return and will to power to resentment and the death of God. Perhaps more importantly, however, we shall endeavor to determine how these doctrines, both individually and collectively, can serve to inform our postmodern world.

Format: A

Special Date(s):

Winter

Science and Society

Baldrige, Anthony

The goal of this ECHO is to explore the relationship between scientific advances and society. We live in a world where science is politicized and scrutinized based on opinion and belief. What is the role of science in society? Can science be moral or immoral? To what extent does or should ethics play in scientific advancement? How should scientific advances and discoveries be integrated into our modern world? These are just a few of the questions this ECHO looks to explore.

Format: B

Special Date(s):

Winter

Slow Down, You Crazy Child: Viennese Magic: Music and Musicians

Karam, Midge

Vienna is more than the title of a pretty cool Billy Joel song; it's the city where Mozart, Beethoven, Schubert, Haydn, the Schumanns, Brahms, and a couple of Strausses wrote some of the most sublime music ever produced! It was about the size of Akron when Mozart and Beethoven hung out with 'Papa Haydn' there...no, really!! In this ECHO we'll time travel a bit - hearing live performances of Chamber Music, Symphonies and even an Opera written by composers who, for at least a time, were from Vienna. Who knows - maybe we'll even sip some cafe & have a bit of Sacher torte!

Note: Students should expect some flexible scheduling to attend local performances (Friday evenings, Saturday matinees, or Sunday matinees.

Format: E

Special Date(s):

Winter

The Flow of the Century: The Intersection of Rap, Hip-Hop, Classic Poetry, and Personal Writing

Borneman, Andrew

What do Shakespeare and Kendrick Lamar have in common? They both like to “flow.” They both have beats. They both use alliteration, anaphora, onomatopoeia. They both rap about love. We will look at all kinds of rap and hip-hop artists from the past 30 years, artists like the Notorious B.I.G, Tupac, RaKim, A Tribe Called Quest, and Jay-Z just to name a few and see what they have in common with poets like Sylvia Plath, Percy Shelley, John Keats, and Robert Frost. We will examine rap and hip-hop the same way we do poetry and note similarities and differences in language and theme. We will consider the influence of race and class struggles of the last 30 years compared with various poets’ personal and political crises from the last few hundred years. Students will create their own flows, their own rap, their own poetry and personal essays that reflect and describe this creativity. Student’s final presentations of poetry and performance portfolios will accompany a trip to a local rap or hip-hop show.

Format: B

Special Date(s):

Winter

The Holocaust

Nataupsky, Jillian

This module will provide students with the history of the Holocaust, including the causes, effects, aftermath, and long lasting legacy. We will also discuss the concept of guilt and responsibility and what role we as world citizens play in preventing future genocides. The class will largely be discussion-based and interdisciplinary. We will examine writing, literature, art, and film to learn about the Holocaust.

Format: B

Special Date(s):

Winter

Virtual Trip to Spain: A Taste of Lorca

Campos-Nava, Aida

This module will serve as an introduction to Spanish art, literature, as well as cuisine. Students will reproduce an Islamic influenced stained glass window, read and analyze *The House Of Bernarda Alba*, written by the famous Spanish playwright Federico García Lorca, watch a movie based on the play, and cook tapas. This module will be taught in English.

Format: B

Special Date(s):

Winter 2

Urban Planning and Placemaking: Rethinking the City

Horgan, Sarah

This module will introduce students to the challenges and opportunities of two downtown districts - Cleveland’s downtown and urban neighborhoods and Hudson’s downtown shopping district - and ask them to envision new ways to use and develop the space. While tackling a design problem for each location,

participants will learn about the basics of urban planning and placemaking and work together in teams to come up with a design plan to rebuild sections of each urban area. Urban planning is a dynamic profession that works to improve the welfare of people and their communities by creating more convenient, equitable, healthful, efficient, and attractive places for present and future generation. Placemaking is a multi-faceted approach to the planning, design and management of public spaces. Put simply, it involves looking at, listening to, and asking questions of the people who live, work and play in a particular space, to discover their needs and aspirations. This information is then used to create a common vision for that place. For the culminating exercise each team will pitch their vision to a panel of local experts who will award a prize to the best design.

Note: This is a full weekend commitment. You must attend all three meetings. This ECHO will NOT conflict with a winter or spring ECHO as it falls in between both sessions.

Format: E

Special Date(s): TBD TBD TBD

Spring

∞: Proof, Paradox, and Perpetuations of Mathematical Infinity

Gieske, Hardy

Much of mathematical truth rests on assumptions involving infinity and the infinitesimal, notably in Calculus and Number Theory. But what is mathematical infinity? What is the smallest number? Is the infinite actually conceivable or are we limited to illusions and metaphors? What contradictions arise in mathematics and elsewhere when infinity “enters the room?” How does infinity translate into other aspects of the human existence such as our perceptions of the universe, time, language, logic, and even consciousness and artificial intelligence? Students in this module will write mathematical proofs in response to proofs, thought experiments, philosophy readings, and student work. To culminate, they will make 5-10 minute videos in which they write proofs, explicate paradoxes, or present short essays on topics of their choosing.

Format: A

Special Date(s):

Spring

Battles Of The Ages

Moynahan, Jimmy

From Troy to Alexander the Great to 300 to the Battle of Salamis and even Gladiator, ancient warfare has been glorified in hollywood countless times. This module will introduce and investigate famous ancient battles that continue to fascinate society today and compare them with how they are portrayed on the big screen. The module will focus on studying these battles from a historical standpoint looking at the people who fought in the battles, the weapons they used, their cultures and then using that information to analyze how hollywood portrayed the battle.

Format:

Special Date(s):

Spring

Building Blocks: Architectural Primer of the Western Reserve

Ong, Diccon

We will be partnering with the Hudson Heritage Association. The goal of the module is to introduce students to the world of residential (and some public building) architecture. We will principally be focusing on the town of Hudson--and perhaps the academic and faculty homes of WRA. Students will learn about the historical evolution of home building as well as the design elements associated with various architectural eras. Some original research may also be done on structures within Hudson.

Format: A

Special Date(s):

Spring

Ekphrastic Writing

Campbell, Patricia

Ekphrastic Writing, for the purposes of this module, is simply writing about works of art. In this module, we will examine art, ranging from paintings, sculpture, glass works, nature, graffiti, stage design and lighting-- just about anything we can address as art, and we will write specifically--creatively-- in response to the art we examine, as well as to pieces housed in some of the world's most well established museums and sites. While we can only visit the Rijksmuseum, virtually, for example, through the magic of modern technology, witnessing the museum's impressive structure and unique contents will help broaden our perspective and enjoyment of all art. Additionally, we will also visit the Akron Art Museum, where we will spend time on location working on written responses to the works of art on display there. Ultimately, we will explore how art inspires us, and we will develop our responses through a body of creative writing. Some weeks this module will meet on Saturday mornings, while at least one other week we will utilize alternate evening hours to take advantage of preferred hours of operation at a chosen site, possibly on a Thursday. One other date may include an extended Saturday morning, reducing our number of actual meetings but making available increased time for exploring--creating--art, on our own and in depth.

Format: E

Special Date(s):

Spring

Justice

LaFontaine, Mark

Is torture ever justified? Can there be a moral case for murder? Is a preemptive military strike a just tactic in warfare? Are there things money cannot buy? We will pursue these questions and more through the lens of several different theories of justice, including utilitarianism, libertarianism, and egalitarianism. Module work will include readings and discussion of classic and contemporary theories of justice (Bentham and Kant, to Nozick and Rawls), law cases and hypothetical dilemmas that will challenge each student's understanding of justice in society and justice as it relates to individual conduct.

Format: A

Special Date(s):

Spring

Lightroom

Doe, Alan

Adobe Photoshop Lightroom is the industry standard for photographers that need to catalog, edit and output digital images. The module will cover one of each of the program's modules in-depth, each week, and culminate with a presentation of the student's portfolio.

Format: A

Special Date(s):

Spring

! Camera! Action!

Fritz, Caitlin

You shouldn't dream your film, you should make it!" - Steven Spielberg. In this module students will work in small groups to produce, film and edit a short film. We will cover the basics of how to break down a script to editing using Adobe Premiere Pro. The class will culminate with a viewing of all the finished films!

Format: A

Special Date(s):

Spring

News and Social Media: Smartphones Welcomed!

Forrer, Sarah

Where do you get your news? This module explores news and how we process it. From traditional media to social -- what sources do you rely on, trust the most and why? From editorial to advertorial, we'll explore traditional print media and television. We'll draft press releases and discuss distribution. We'll take a deep dive into social media and how it's used for marketing and sharing news. During one of our sessions, students will visit a local news station in downtown Cleveland. (This class will meet for 4(?) Fridays and one extended weekend day to visit a news station)

Format: B

Special Date(s):

Spring

Re-Cycle

Borrmann, Ralf

The purpose of this module is twofold: the first is to familiarize the students with the history, the mechanics, and the physics of bicycles as mode of transportation around the world. The second very practical goal is that each student learns about basic bike maintenance such as fixing flat tires, replacing parts, making general adjustments and tune-ups, etc. This class is hands-on, at the shop, with tools, and getting your hands dirty. The participants work in teams on discarded bicycles that were given to the group and will be donated to local charities once they are repaired and safe to use. We often assemble a functioning bike with parts from different bicycles ("Frankenstein-bikes") and there is a lot of room for creativity. The group also maintains and repairs the bicycles of the WRA bike program.

Format: A

Special Date(s):

Spring

Rock n' Soc: Using Popular Music to Think Theoretically

Madhi, Khalid

The purpose is to introduce key social scientific concepts that are expressed in song lyrics. As such, some guiding questions can facilitate in-class conversations that address such questions as: What are the political themes in Beyoncé's or Bruce Springsteen's songs. How do Dolly Parton and Koko Taylor negotiate their domesticities in their fight to "keep their man"? Why does French Hip Hop have more literary and philosophical references than its American counterpart? Is Rage Against the Machine an anarchist group? How much Foucault did Pink Floyd read? And did they predict the rise of Trump? Why are live performances a manifestation of what sociologists call "group solidarity"? Who are "the Benjamins," and what would it mean for Taylor Swift and Zayn Malik to "Live Forever"?

Format: A

Special Date(s):

Spring

Technology and You: Learn how to work with our Robot overlords of the Future!

Schwartz, Brian

Enhance your knowledge of technology and the world around you. Improve your job outlook by learning the basic skills that you will need while job hunting later in life! Learn the basics of Microsoft Windows and Apple Mac OS, the components inside your computer, basic troubleshooting, server hardware, and more. We will also discuss the latest in technology news from computers, cell phones, tech companies, and more.

Format: B

Special Date(s):

Spring

The Holocaust

Nataupsky, Jillian

This module will provide students with the history of the Holocaust, including the causes, effects, aftermath, and long lasting legacy. We will also discuss the concept of guilt and responsibility and what role we as world citizens play in preventing future genocides. The class will largely be discussion-based and interdisciplinary. We will examine writing, literature, art, and film to learn about the Holocaust.

Format: B

Special Date(s):
