



St. Thomas Aquinas High School Winterterm Program of Studies January 18-21, 2022

Dear St. Thomas Aquinas High School Students,

Welcome to the 2022 edition of our Winterterm Program of Studies. How exciting after a pause for a year! We are blessed and fortunate to have both faculty and professionals within our community who support education and allow our school to advance your education in unique and awe-inspiring ways.

Our mission statement reminds us that St. Thomas Aquinas High School transforms the lives of our students through Catholic education, an education that offers them the opportunity to develop their unique gifts. Winterterm affords our young men and women the chance to widen their learning horizons, step outside of the traditional instructional atmosphere and pursue an area that interests them intellectually.

Students, we invite each of you to **challenge** your mind, **support** your passion and **transform** your perception of learning so that you may fully embrace what promises to be a remarkable educational experience.

Purpose and Scope

Winterterm provides meaningful and enriching educational experiences for our students. The single course structure allows students and faculty to bond and work more closely than they do in regular classes. Students may devote their time and attention to a singular area of study where they can engage in academic topics that are not typically offered in the regular semester curriculum.

The enhanced intellectual spectrum embraces not only faculty and staff but also alumni, parents and area professionals who seek to participate as instructors. The 2022 Winterterm program offers St. Thomas Aquinas High School students a pedagogical palette of colorful learning opportunities, the kind of which is generally found only on college campuses or as part of international study.

Take a moment to read through each course description, consider your personal area of interest and knowledge, and stretch yourself to new heights. The St. Thomas Aquinas Winterterm curriculum is extraordinary.

Remember, St. Thomas Aquinas Students: ***Aim High. Soar Higher.***

2022 Winterterm Offerings

The feasibility of each course offering will be determined once the number of registrants has been obtained. A course may not be offered if the number of registrants is too low to make the course effective and feasible.

Some options require that students provide their own transportation.

W01- Course Title: Adventures in Biomedical Engineering

Instructors: Mr. Ron Holtz, STA Science Teacher and Mrs. Julie Verde, STA Math Teacher

Fee: \$80

Student Maximum: 12

Sessions: 4 days- Full Day

Location: STA and off-campus, still to be confirmed: Lonza, Exeter Hospital, Form 3D (Dover), State of NH Dialysis Center

Course Description: Biomedical engineering involves the application of engineering principles and design concepts to medicine and healthcare for the purposes of advancing diagnostic and therapeutic techniques. Often seen as an interdisciplinary field, careers in biomedical engineering involve a wide variety of engineering applications ranging from applying knowledge and understanding of genetics to cell and tissue development (biotechnology – imagine using a 3-D printer to “print” a human organ) to the development of medical implants and devices to support regenerative medicine and biomechanics. This Winterterm course is designed to explore careers in biomedical engineering by engaging in some basic laboratory techniques used in the field of biotechnology, and in the application of laboratory techniques and engineering (both design and build techniques) to biology. Experiences will also include round-table discussions with engineers in the field of biomedical engineering and a possible tour of biomedical facilities.

W02- Course Title: 50 Years of Disney Magic

Instructor: Ms. Jessica Cummings, STA Center for Academic Achievement

Fee: \$65

Student Maximum: 15

Sessions: 4 days- Full Day

Location: STA and off-campus

Course Description: In this course, we will explore the wonderful world of Disney and learn about the various programs, events, and systems that have gone into making the Disney franchise such a success over the last 50 years. This year marks a momentous occasion, as the Magic Kingdom in Walt Disney World, Florida celebrates 50 years of magic. We will begin by taking a step back in history with its founder, Walt Disney, and learn about his original vision for the company. We will then take a look at the empire that it has become today, including its influence on society. The opportunities through the Disney franchise are endless, including professional internships, imagineering and design, various culinary and hospitality programs, and international experiences. Throughout the week, we will explore some of these opportunities first-hand. Some example opportunities include speaking with an expert in the field of animation and learning what this career entails, meeting with an alumni of the Disney College Program, trying our skills with world-famous Disney Park recipes, consulting with a certified Disney travel agent, and even seeing a Disney production at a local theater. This is a great week to learn about how you can turn your passion for

Disney into a possible career, or future internship. Fee will include the cost of the field trip, activities, and lunch for two of the four days.

W03- Course Title: Community Service: An Exploration of Service Agencies

Instructors: Mr. David Couture, STA Theology Teacher, Mr. Paul Mueller, STA Social Studies Teacher, Shannon McAden, STA Theology Teacher, and Mr. Patrick McCafferty, STA Theology Teacher

Fee: none, possible transportation fee

Student Maximum: n/a

Sessions: 4 Days- Full Day

Location: Off-site at various service locations

Course Description: Service to others is an important component of our lives. This Winterterm program will give students an opportunity to be involved in hands-on service while also learning about a variety of human service agencies. Each day we will be off-campus at a different service organization. At each organization, we will learn why they exist, how they operate, and whom they serve. Furthermore, we will have an opportunity to roll up our sleeves and work alongside those who serve the organizations each and every day. Service sites may include homeless shelters, soup kitchens, food pantries, programs for individuals with disabilities, and more. This is a great opportunity for students to complete community service but, more importantly, this is an opportunity for students to learn more about human services and how we can make a difference in the world.

W04- Course Title: The Office: An American Phenomenon

Instructor: Ms. Katie Graham, STA English Teacher

Fee: none

Student Maximum: 18

Sessions: 4 days- Half Day

Location: STA

Course Description: *The Office* called the final wrap on its series in May of 2013. Despite the show ending nearly a decade ago, fans of *The Office* streamed over 57 million minutes of content in 2020. What is it about this iconic show that has caused it to stand the test of time? Why are we still watching *The Office*? In this course, we will take a look back and try to answer these questions. This course is for anyone interested in learning more about the Dunder-Mifflin Paper Company team whether you stream *The Office* every night before you go to bed or you have never seen a single episode before. We will watch footage, conduct research, and listen to podcasts to deep dive into the original idea for the show, the craft that went into creating a unique viewing experience, and decide for ourselves why viewers come back time and time again.

W05- Course Title: The Great British Baking Show

Instructor: Ms. Hettie Haudenschild, STA Art Teacher

Fee: \$50

Student Maximum: 10

Sessions: 4 days- Half Day

Location: STA

Course Description: We will watch the Great British Baking Show and students will be challenged to make their own creations such as apple pies, cookies, sticky puddings, etc. Students will be given materials

and recipes. Test your knowledge, learn to push yourself, and eat new things. This interactive class will be exciting and useful. On your marks, get set, BAKE!

W06- Course Title: Puerto Rico Trip

Instructors: Mr. Keith Adams, Director of Campus Ministry and Student Experience, Ms. Brittany Colford, STA Science Teacher, Mr. Howard Puertas, STA World Languages Teacher, Ms. Isabella Mutch, STA World Languages Teacher

Fee: -

Student Maximum: n/a

Sessions: 4 Days- Full Day

Location: Off-site

Course Description: Weeklong trip to Puerto Rico for service and cultural immersion. Registration for this trip took place during the summer and is now closed.

W07- Course Title: Criminal Justice

Instructors: Mrs. Jen Duprat, STA Social Studies Teacher

Fee: TBD ... \$20?

Student Maximum: 20

Sessions: 4 Days- Full days

Location: STA, plus possible field trips

Course Description: This course provides an introduction to the criminal justice system. The primary goal of this course is to develop a general understanding of the criminal justice system's response to crime in society. It will introduce students to the components of the criminal justice system – police, courts, and corrections. Students will also examine the Bill of Rights and the rights of the accused. If you have an interest in a career in law enforcement, working in the legal system, or the field of forensic science, this is the Winterterm for you.

W08- Course Title: United States in World War II

Instructors: Mr. Patrick Hureau, STA Social Studies Teacher

Fee: \$10

Student Maximum: 20

Sessions: 4 Days- Full days

Location: STA & The Wright Museum of WWII - Wolfeboro, NH

Course Description: Students will examine the American experience during World War II, both at home and abroad. Over the first three days lectures, research activities and films will be used to give students a strong understanding of the Homefront, European Theatre and Pacific Theatre through the lens of United States civilians and soldiers involved in the Second World War. Both secondary and primary source material will be utilized during each session. Ultimately, after three days of study, students will visit the Wright Museum of World War II in Wolfeboro, NH.

W09- Course Title: Spring Musical Workshop

Instructors: Mrs. Kate Collins, STA English Teacher, Ms. Brenda LaForce, STA Fine Arts Teacher

Fee: \$0

Student Maximum: none

Location: STA

Sessions: 4 days- Full Day

Course Description: This year's Spring Musical is extra early (March 31st!), so this week-long intensive workshop is an opportunity to get a head start on learning the music and steps, mapping out choreography, and blocking scenes. We might even be working on some of the set pieces for the show. By early January the show will be cast and we'll be ready to begin. If you are thinking of or planning to be a part of the show in March, either onstage or on stage crew, you need to sign up for this course!

W10- Course Title: Foundations in Personal Finance

Instructor: Ms. Jessica Lennon - STA World Languages Teacher

Fee: \$35-\$200, depending on signups

Student Maximum: 30, minimum of 5 to run program

Sessions: 4 Days- Full Day

Course Description: Too many teens are graduating high school with no idea about how to handle money. This potentially could lead them to living with their parents until they're almost thirty years old or living on their own, living paycheck to paycheck with a stress cloud over their head of how they're going to pay next month's rent. In this Winterterm course, students will learn how to budget and stay out of debt, save an emergency fund, graduate college debt-free, and invest for the future.

W11- Course Title: A Brief History of the Middle Ages

Instructor: Mr. Reno Burnett, STA Social Studies Teacher

Fee: \$0

Student Maximum: 20

Sessions: 4 Days-Full day

Location: STA

Course Description: In this full day, academic-focused course the Middle Ages will be examined in depth. Topics will include the early Germanic kingdoms, the role of the Church, feudalism, daily life, warfare, art, architecture, and literature. Lectures, discussions and projects will focus on major turning point events such as the Battle of Hastings, Black Death, the Crusades, and the Hundred Years War. Activities will include teacher lectures, videos, simulations, research and student presentation.

W12- Course Title: Origami 1 & Origami 2

Instructors: Mrs. Ginny Richburg

Fee: \$10 per session

Student Maximum: 15 per session

Sessions: 4 Days- Half days, AM session & PM session (students can sign up for either one or both)

Location: STA

Course Description: Morning - Origami 1: Freestyle forms - flowers, animals, etc.; Origami 1 transforms sheets of paper into animals, plants and flowers by series of prescribed folds and techniques. By adding other arts and crafts materials, pieces can be displayed as wands, mobiles, dioramas and other 3-d interpretations. Students will develop display-worthy pieces throughout the Winterterm week.

Afternoon - Origami 2 - Unit Origami forms creating 3-d models, like a paper soccer ball, etc. Origami 2 turns the sheets of paper into interlocking pieces to create a simple box, a patterned cube, and other 3-d figures and models also display worthy.

W13- Course Title: Visual Poetry: The Art of Words

Instructor: Ms. Katie Graham, STA English Teacher

Fee: \$3

Student Maximum: 23

Sessions: 4 Days- Half day

Location: STA

Course Description: The visual arts and poetry go hand in hand. Whether you are visualizing a narrative poem in your mind or using colorful markers to write down a meaningful quote, words paint a picture. In this course, we will practice several forms of visual poetry to help bring to life the meaning of a variety of texts, some from famous poets and some composed by ourselves. Students will use collage, audio/video recordings, photography, digital manipulation, and other techniques to accentuate the meaning of literature and unleash the power of words. A small fee will be collected for art supplies and students are encouraged to bring computers, phones, or any technology they choose to assist in these creations.

W14- Course Title: Let's Make a Zine!

Instructor: Mrs. Mariah Kirsch, STA English Teacher

Fee: \$5

Student Maximum: 15

Sessions: 4 days- Half Day

Location: STA

Course Description: Together we'll learn to make one-page zines which combine words and images to create stories, make messages, or tell jokes. If you're curious about what the final product might look like, search "one page zine" in Google Images or YouTube. Great for storytellers, artists, or those skilled at stick figures! No prior experience with art or creative writing needed.

W15- Course Title: Preparing for College 101

Instructor: Ms. Erin Murphy, STA World Language Teacher

Fee: none

Student Maximum: 18

Sessions: 4 days- Half day

Location: STA

Course Description: This workshop will provide tips to help make sure you're ready for every aspect of the college experience---from choosing the best fit for you, preparing your application and practicing for an interview, to developing habits to help you thrive once you're there. The time and effort you spend preparing for college now can help ease the transition and allow you to get the most out of the experience, without feeling overwhelmed by the process. The goal of this workshop is to help you college with confidence.

W16- Course Title: Game Programming with C#

Instructor: Mr. Bill Green - STA Math Teacher & Mr. Jesse Clardy from Helix E=Sports

Fee: \$99

Student Maximum: 20

Sessions: 4 days- Full Day

Location: Helix E-sports @ The Rinks in Exeter

Course Description: The Game Programming in C# Winterterm program will give students the opportunity to sharpen their C# skills by starting to build a simple video game using C#, Visual Studio, and Unity. Students will have the opportunity to work on first person control modules or on developing the game world and to test out their work in the Unity Engine. Students will be able to work on the project individually or in groups of 2 or 3 and will have a copy of their completed work to take with them at the end of Winterterm.

W17- Course Title: Enchantment of the Senses

Instructor: Dr. Kelleigh Kennedy, STA Science Teacher, Ms. Mary Pate, STA English Teacher, Ms. Nancy Hasbun, STA Science Teacher

Fee: \$50

Student Maximum: 40

Sessions: 4 days- Full Day

Location: STA

Course Description: If you enjoy soft lights, warm scented baths and sweet delights, this is the course for you. You will explore the worlds of essential oils, paper crafting and the art of chocolate making. At the completion of this course, students will have a nice gift basket filled with candles, soaps, chocolates and hand-made, personalized cards to take home.

W18- Course Title: The Tragedy of Julius Caesar and Contemporary American Politics

Instructor: Mr. Ed Tinney, STA English Teacher

Fee: none

Student Maximum: 20

Sessions: 4 days- Full Day

Location: STA

Course Description: As a *New York Times* reviewer wrote, "Perhaps the most unsettling theme in *Julius Caesar*, seen through the prism of today's politics, is the danger that threatens when the public perceives a void of power at the seat of government." One of Shakespeare's less-studied tragedies, *The Tragedy of Julius Caesar* poses questions about the source and nature of power and confronts the problems caused by blind devotion to self, man, or principle. In this full-day, academic-focused course, the play and its historical context will be examined in depth. Additionally, connections to contemporary American culture and politics will be discussed. Lectures, discussions, and projects will focus on important concepts and themes. Activities will include reading the play aloud, video performances of the play, teacher-led lecture, as well research leading to a student presentation.

W19- Course Title: Robotics**Instructor:** Mr. Chrys Demos, STA Science Teacher**Fee:** \$0**Student Maximum:** 15**Sessions:** 4 days- Full Day**Location:** STA

Course Description: Robotics season kickoff is January 8th 2022. This Winterterm session will be critical to our robotics program from brainstorming through project execution and the final tuning of performance/function testing. It will be especially important for robotics club members to be present to help meet the team goals. See Mr. Demos with any questions. Get your hands dirty, enhance your resume, and get valuable technical experience in robotics. If you are interested in hands-on building, drafting, coding, troubleshooting and problem solving, come join us for Winterterm. You will work with a team of regular club members to build a technology that solves technical challenges. No prior experience is necessary -- we all learn together. Skills this club builds may include organizing people/tasks, identifying and solving work stoppages, drafting/3D printing, setting up motors, controls, sensors, building structures and designing systems from the ground up. All activities will be taking place on the first floor of STA in and around the Robotics lab. There is no cost to join. You do not have to be part of the regular club. Expect to spend time brainstorming new designs for this year's technical challenge.

W20- Course Title: How would you like to create a board game?**Instructors:** Mr. Andrew Croteau, STA Math Teacher**Fee:** none**Student Maximum:** 20**Location:** STA**Sessions:** 4 days - Half Day

Course Description: Do you enjoy playing board games? Have you ever thought about creating your own? For this activity, students will be shown a variety of different board games and will have discussions about what makes board games fun and enjoyable. Then, students will have the opportunity to create their own board game and can create a video explaining to others how to play their game. If time allows, students will be able to play each others' games.

W21- Course Title: Math Puzzles**Instructors:** Mr. Andrew Croteau, STA Math Teacher**Fee:** none**Student Maximum:** 20**Location:** STA**Sessions:** 4 days - Half Day

Course Description: For those of you who have an appreciation for mathematics, this Winterterm activity is for you! I have a subscription to a math puzzle magazine filled with many fun puzzles such as Sudoku, Figure Logics (math crossword puzzles), KenKen and lots more. Students will work together to solve some of these puzzles and will also have the opportunity to create their own math puzzles!

W22- Course Title: Golf For Business and Life

Instructor: Mr. Dan Limauro, STA Math Teacher

Fee: ~\$105, tbd by enrollment

Student Maximum: 12

Sessions: 4 Days- Full Day

Location: STA, Pease Golf Course, Portsmouth Country Club

Course Description: Golf For Business and Life is designed to introduce new people to the game of golf and help those that already play better their skills to be more comfortable on the golf course. Students will learn the history of the game, basic etiquette and rules along with having the chance to have their golf swings video taped and reviewed. This class will spend 2.5 days in the classroom, a half day at Portsmouth Country Club using their indoor golf simulators to film their golf swings and receive pointers and 1 day at Pease Golf Course where students will have the ability to practice what they learned by playing some virtual golf on one of their 3 indoor golf simulators.

W23- Course Title: Climate Change in New England

Instructor: Ms. Amy Petelo, STA Science Teacher

Fee: \$100

Student Maximum: 15

Sessions: 4 Days- Full Day

Location: STA & off-site locations

Course Description: We will explore the science of climate change through the use of activities, labs, simulations, videos and guest speaker presentations. We will talk about common climate change misconceptions and be encouraged and inspired by reading and learning about other climate change advocates. The goal of this program is to encourage and breed hope, so there will be an emphasis on solutions. You will research a local impact that climate change is having on New England and the Gulf of Maine, compare current solutions and hypothesize new solutions. You will create a research poster, which will be presented to the school community to increase awareness. You will be encouraged to become climate ambassadors, sharing your knowledge and creating change.

W24- Course Title: Pottery Workshop

Instructor: Ms. Hettie Haudenschild, STA Art Teacher

Fee: \$25

Student Maximum: 10

Sessions: 4 days- Half Day

Location: STA

Course Description: This pottery workshop will have you creating beautiful hand built vessels, decorations, and sculptures. Students will be given their own bag of clay and their own tools. You will be making beautiful pieces of artwork that can last your lifetime. Take advantage of our amazing kiln and glazes and make something special.

W25- Course Title: Mindfulness Activities for Stress Management

Instructors: Dr. Julie Schneider, STA School Counselor

Fee: none

Student Maximum: 25

Sessions: 4 Days- Half Day:

Location: STA

Course description: This course will teach introductory skills and activities for management of stress and anxiety. Students will gain a basic understanding of what happens in the brain when they experience stress/anxiety. They will learn a variety of skills and activities they can use every day to better manage stress and anxiety, and to increase a general sense of wellbeing. .

W26- Course Title: College Campus Visits

Instructor(s): Ms. Angela Devoid, STA School Counselor

Fee: TBD

Student Maximum: 20 - Sophomores & Juniors only

Sessions: 4 days- Full Day with overnight

Location: STA & Off-site

Course Description: Do you want to have the experience of traveling to and visiting more than 10 colleges and universities? Find the colleges with your "right fit" academically, socially and financially? With the help of goCAMPUSing, America's premier college campus tour company, I will be offering a 3 day/2 night trip that would include tours/ information sessions at colleges/universities in the Boston and Rhode Island areas. This is the perfect opportunity to see a variety of schools that range from big to small, rural to urban, public to private. One of the most valuable things you can do to plan for the college admissions process is to visit as many schools as possible. This will help you create a list of schools and give you more of a "feel" for what you want and don't want in a college university. We would travel to schools on Wednesday (overnight), Thursday (overnight) and Friday. Tuesday would be 1/2 day preparing for the trip.

WINTERTERM INDEPENDENT STUDY

Students are encouraged to develop their own learning opportunities through an independent study on a topic that interests them. Independent studies must relate to the school's mission and produce a final product (paper, presentation, podcasts, website, etc.) to share with members of the school community. The final product is due to Mr. Marquis by January 28, 2022. Students interested in this option must complete the Winterterm Independent Study Application.

WINTERTERM INTERNSHIPS

Students are strongly encouraged to participate in an internship or career shadow opportunity that pertains to their potential field of study. Self-arranged internships must be approved by the Principal before December 10, 2021 using the Winterterm Internship Application form. Internship students must produce a final product (paper, presentation, podcasts, website, etc.) to share with members of the school community. The final product is due to Mr. Marquis by January 28, 2022. An evaluation must be completed by the student and site supervisor to receive credit for all internships.

Internships in previous years have included areas of interest in physical therapy, pharmacy, oral surgery, veterinary science, business administration, aeronautical engineering, and fire rescue.



Winterterm Independent Study Application Form

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Students, we invite each of you to **challenge** your mind, **support** your passion and **transform** your perception of learning so that you may fully embrace what promises to be a remarkable educational experience.

PERSONAL DATA

Name _____

Class of _____

Cell Phone _____

Advisor _____

INDEPENDENT STUDY PROPOSAL (submit a separate page to Mr. Marquis by 12/10/21)

1. Please describe the purpose of your independent study. How does the purpose relate to the school's mission?
2. How does this expand your knowledge from what you have learned at St. Thomas Aquinas?
3. Please describe what you will gain from this experience.
4. What resources and materials will you use to complete your independent study?
5. Please describe the final product (paper, presentation, podcast, website, etc.) you will create. (Be prepared to present this to members of the school community)

By signing below, you agree to conduct yourself with appropriate behavior consistent with St. Thomas Aquinas High School. Final products are due to Mr. Marquis by January 28, 2022.

Parent Signature: _____

Student Signature: _____

Approved by Principal: YES _____ NO _____

Principal Signature: _____ Date: _____

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PERSONAL DATA

Name _____

Class of _____

Cell Phone _____

Advisor _____

INTERNSHIP - *The internship may be service based, vocational, job sharing, or a learning experience encounter.*

If you have a location/internship that you have found on your own, please complete the following information:

Name of Company _____

Location _____

Point of Contact _____

Phone _____

Internship field _____

Who would you shadow? _____

What will you be learning? _____

What type of final product (paper, presentation, podcast, website, etc.) will you create about your experience? (be prepared to present this to the school community)

Why are you interested in this internship?

It is the responsibility of the parent(s) to determine the methods of transportation to and from the internship.

By signing below, you agree to conduct yourself with appropriate behavior consistent with St. Thomas Aquinas High School. Please be on time, responsible and conscientious. Dress code is expected, unless prior approval is received from the Principal.

Parent Signature: _____

Student Signature: _____

Approved by Principal: YES _____ NO _____

Principal Signature: _____ Date: _____