

Master Schedule Summer 2024

Monday/Tuesday

Wednesday/Thursday

8:00 - 8:15 a.m.	Arrival	Arrival
8:15 - 8:30 a.m.	Morning Meeting	Morning Meeting
8:45 - 9:35 a.m.	Block A	Block A
9:50 - 10:40 a.m.	Block B	Block B
10:55 - 11:45 p.m.	Block C	Block C
12:00 - 12:45 p.m.	Lunch	Lunch
1:00 - 1:50 p.m.	Block D	Block D
1:00 - 3:30 p.m.	Career Internships	Career Internships
2:00 - 3:45 p.m.	CBCs/Outreach/Activities	CBCs/Outreach/Activities
3:45 - 4:00 p.m.	Departure	Departure

Students will enroll in 4 courses:

- One core class (Rising 10th: “7 Habits”, 11th: “Financial Literacy”, 12th: “Senior Writing”)
- One preview class
- Two elective classes

*Exception: Rising Seniors who have a Career Internship, will not take a 4th course during D block.

COURSE DESCRIPTIONS

Core Classes

Rising Sophomores - 7 Habits of Highly Effective Teens - (Dermody, Piccirillo, Reynolds)

Do you want a step-by-step guide to help you get from where you are now to where you want to be in the future? Your plans, goals, and dreams are all within your reach; you just need a road map to help you get there. That's what Sean Covey's landmark book, *The 7 Habits of Highly Effective Teens* has been to millions of teenagers: a handbook to self-esteem and success. This class will apply the principles of this book to help you face tough issues, make good decisions, all while enhancing your communication skills. *All rising sophomores take this course.*

Rising Juniors - Financial Literacy - (Niquette)

Financial literacy is defined as “the ability to understand finance”. More specifically, it refers to “an individual's ability to make informed judgments and effective decisions about the use and management of their money”. To help make these informed judgments and effective decisions, we will learn the terms and programs involved in a healthy financial future. We will be learning about having a bank account, credit cards, credit scores, loans, budgets, and more. *All rising juniors take this course.*

Rising Seniors - Senior Writing - (Boulé, Seidel)

Your application essay is a college's first impression of you. In this class, you will learn strategies for answering typical essay prompts, developing your writing voice, and researching colleges in order to inform your writing. *All rising seniors take this course.*

Preview Classes

HISTORY/SOCIAL STUDIES:

Government Preview - (Boulé)

This course is an introduction to the basic concepts of government. As a class we will discuss the momentous creation of the U.S. Constitution, an event that shaped the modern world as we know it. We will investigate why the “Framers” (Founding Fathers) felt the need for The Constitution, why they structured our government as they did, and the essential principles they embedded in this amazing “living document”. Students will study the U.S. Constitution, debate its ratification, and propose amendments based on our government today and the needs of a contemporary U.S. society. Additionally, this course also serves to help students prepare to experience the challenges, responsibilities, and satisfaction of being actively involved citizens. *This course is a preview of “Participation in Government” for rising seniors.*

ENGLISH & LANGUAGES:

English Preview - (Seidel)

Learn and practice strategies for success on the English Regents exam. We will focus on proven techniques to master the exam while building confidence in your reading comprehension and writing skills. We will also explore study skills, tips, and tricks, all of which will help you to prepare for your upper-class courses. *This course is a preview of “English 11” for rising juniors or sophomores.*

French III Preview - (M. Marino)

Bonjour! Students will continue to develop skills in speaking, reading, writing, and listening while building more diverse vocabulary and structures. The emphasis will be on the use of the French language in classroom activities. A deeper insight into the target culture will be developed through enrichment in and out of the class.

MATH:

Geometry Preview - (B. Marino)

Math as a language? Learn how to communicate your ideas effectively to convince another person that you are correct. We will explore concepts of logic that will help students clarify their thinking in real-world situations as well as geometric proofs.

Algebra II/Trigonometry Preview - (B. Marino, Phillips)

This is an opportunity to improve your math skills and prepare for college. The course will include logarithm and exponential functions, trig applications, probability and statistics.

Calculus Preview - (Phillips)

How long will it take for a water tank to empty if it has an x-gallon per minute outflow and a y-gallon per minute inflow? Students will learn how to use calculus to solve this and other interesting real-life problems. In this course you will develop knowledge of limits, infinity, and how to find a derivative.

Statistics Preview - (Phillips)

An introductory course designed to help students understand and appreciate the role statistics plays in their everyday life. Topics will include: data collection, using statistical measures for comparing data, probability, and probability distributions. It has been said that, “Statistics is the art of never having to say you are wrong”. Come learn how to evaluate data and discover the power of statistics!

SCIENCE:

Earth Science Preview - (Piccirillo)

Earth's surface is a dynamic environment shaped by both natural and human influences. We will explore patterns of our changing Earth and how they are seen in the world around us. A portion of our exploration will take us beyond Earth as we look at the galaxy that houses us in the universe. A key geologic principle states "the present is the key to the past" and we will dive into these current processes that provide clues as to what prehistoric earth looked like, as well as how it may look in the future. Topics include atoms, the periodic table of elements, bonding, and chemical reactions.

Living Environment Preview - (Stiles)

You've always heard about the primordial soup, but what was really in that mix that gave Earth life? That will be the starting line for this course as we dive into the tiniest of the tiny that brought about the great explosion of life on this planet. We will examine evolution, from chemical evolution that gave us that wonderful soup, to the drunken walk of alleles, and even the big guy himself, Charles Darwin. With this, we will talk about the background forces that drive these processes forward and how they affect us today.

Chemistry Preview - (Piccirillo, Stiles)

This chemistry course will introduce the major concepts of chemistry using atomic models and the application of chemistry to common, everyday household items such as dye, rock candy, and ice cream. Topics include atoms, the periodic table of elements, bonding, and chemical reactions.

Physics Preview - (C. Marino)

Why is the sky blue? Will a heavier object fall faster than a lighter object? Where does energy come from? What are quarks? How can engineers make nanoparticles? All these questions can be answered by studying the field of Physics. Physics is fundamental to the understanding of the universe. In this preview course, you will investigate physics phenomena to learn how the world works around us. Topics may include forces, projectiles, energy and more! So, come on, let's start on a path that has been walked by people like Stephen Hawking and Einstein and see where it takes us!

Electives

A Cappella 101 - (Hampton)

Do you like Pentatonix or the "Pitch Perfect" movies? Talented singers and beginners are welcome here! In this course, you will develop an understanding of basic singing technique, learn the basics of beatboxing, work on reading music, the history of a cappella and perform choreographed a cappella style arrangements. You will learn what it feels like to be in an a cappella ensemble! Aca-Awesome!

AI Think, Therefore AI Am - (Mousseau)

Embark on an explorative journey into the world of Artificial Intelligence this summer. Delve into the ethical considerations of AI usage, learn how to harness AI tools for academic enrichment, and stay abreast of the latest AI news and cutting-edge advancements. From understanding the basics of machine learning to exploring the vast possibilities AI offers, this course aims to equip students with knowledge and skills to navigate the evolving landscape of technology. Join us to unlock the potential of AI and discover how it can shape our future.

Art in Three Dimensions - (Potthast)

Ceramics, plaster gauze, found materials, wire epoxy, paper... anything and everything will be the basis for the creation of art in 3-D. We will explore sculpture in art history to find inspiration from famous and successful artists through their masterworks. Projects will include: pottery, clay sculpture, plaster casts, natural object installations, and mobiles.

Character Design for Artists - (Potthast)

Using a wide variety of mediums such as drawing, painting, and Adobe Photoshop, students will bring their ideas and research for characters into artistic reality. This class will teach processes for research, backstory development, character profiles, and scene development. Students will learn to how to create character sheets and storyboards. Most importantly, learn by gaining new insights through quality artistic group critiques and creative exchange with other UB students. All artistic skill levels are welcome in this class.

Debate It - (Reynolds)

Throughout the history of the United States, there have been issues that have divided the nation, such as abortion, creationism, legalization of marijuana, gay marriage, euthanasia, gun control, tax rate, drinking age, voting age, and many more. We will research these issues, formulate our opinions, and Debate It! We will learn effective and diplomatic debate techniques and prepare for a final group debate the last week.

Films in Science - (Stiles)

In this course, we will answer some of the more demanding questions about life, the universe, and *everything*. Is “Back to the Future” or “Bill and Ted’s Excellent Adventure” a realistic depiction of time travel? If we are living in a Matrix-style simulation, would you want to know, or be blissfully unaware? Is “Jurassic Park” scientifically plausible? Are these movies good science or junk? We will discuss these questions and more, as we tackle some of the most influential science films in recent generations.

Genealogy 101 - (B. Marino)

Who are you? Where did you come from? Find out who you are and what your family background is through research. Learn to read a census and explore other government documents to learn more about your ancestors.

Health and Fitness - (Seidel)

Want to learn how to exercise and eat healthy without an expensive gym membership? Want to stay in shape for the fall sports season? Being active and eating healthy are tied to better physical and mental health. In this course, we will explore the many ways to feel our best, from bodyweight exercises, track workouts, group games, yoga, and meditation to name a few. We will also discuss eating habits and relaxation and breathing techniques to get you feeling your best.

Introduction to Emergency Medicine - (C. Marino)

Are you thinking about pursuing a career in the healthcare field? Have you considered emergency medicine? In this class, we will look at many different aspects of healthcare treatment, and while we will be focusing on emergency medicine, preparedness, and response, students who successfully complete this course will be able to take those skills and transfer them to any healthcare career. Students will become familiar with basic first aid and CPR skills, patient assessment, as well as the functions of first responders in our EMS system. This is a hands-on course!!!

Introduction to Forensics - (C. Marino)

The popularity of shows like Criminal Minds and more have led many young people to pursue careers in this field. Forensic Science broad, interdisciplinary field which requires knowledge of chemistry, biology, physics, laboratory techniques, and law; as well as skills in written communication, verbal communication, and computer applications. Students in this class will learn skills in evidence collection and analysis, fingerprinting, documenting a crime scene, ballistics, blood stain analysis, and more. Students will participate in simulations and work collaboratively with partners to problem-solve and crack the case!

Laser Beams & 3D Dreams - (Mousseau)

Immerse yourself in the exciting world of digital fabrication! This course merges 3D design, printing, and laser cutting into one comprehensive experience. Aimed at beginners, the course covers the essentials of creating with Tinkercad, bringing designs to life through 3D printing, and crafting detailed items with a Glowforge Laser Printer. Students will not only print their own 3D designs, but also explore the creative potential of laser cutting to produce a range of projects, from decorative pieces to practical items. Learn about material selection, laser effects, and finishing techniques to enhance your creations. This course offers a unique blend of theory and hands-on practice, making it perfect for anyone looking to explore the intersections of design, technology, and art.

Olympic Scrabble - (Dermody)

Are you a word nerd? Open your mind and widen your vocabulary by playing Scrabble. Learn the art of strategy and mathematic problem solving through active game play. This course will focus on vocabulary enrichment, critical thinking, and strategic skill development. Learn to trust yourself more and more with every power move. Unleash your word creativity by experimenting with prefixes and suffixes. YOU will learn to see through the board. Embrace your inner wordsmith, score higher on your SAT, beat your own grandmother, and discover knowledge of the world around you. Build your lexicon one tile at a time and become the word warrior in yourself. There will be prizes for gold, silver, and bronze players.

Paint a Mural - (Potthast)

This class will begin with an exploration of significant murals and street art, along with the artists who created them, simultaneously warming up our painting and drawing skills. Next, we will move into the process for creating a large-scale mural that will be permanently added to the walls of the UB lobby. You will learn a variety of techniques, materials, styles, and graphic designs that bringing it all together in a timeless masterpiece. Class members will create all the images from start to finish, resulting in a work that reflects the spirit of UB.

Public Speaking - (Reynolds)

Become more comfortable and effective as a public speaker! Learn the ins and outs of researching, writing, and presenting a speech.

Robotics: Intro. to Automation - (Mousseau)

Open your garage door with your smart phone, turn on your coffeemaker from Twitter, or even build a robot! These are just a few of the many ways people are using Arduino, the open-source, single-board microcontroller. This UB course will show you how to start programming interactive objects with the Arduino. By the end of this class, students will have learned the basic fundamentals of using and programming the Arduino Uno Microcontroller. Students will learn how to code, build, and manipulate a plethora of robotics projects such as controlling LEDs, motors, buzzers, as well as using a multitude of sensors, such as temperature, humidity, and light.

Science Fiction - (Piccirillo)

Should we bring back the Woolly Mammoth? Why might we be hesitant to bring A.I. into our society? In what ways should we explore the horizons of science? This course will use science fiction to drive conversations about the ethics of science experimentation and how society plays a role in scientific achievement.

Skills & Thrills for the Road of Life - (Niquette & Reynolds)

During the school year you study hard to calculate formulas, write papers, and memorize facts. But...do you know how to tie a tie, sew on a button or get pizza sauce out of your favorite t-shirt? Do you want to learn how to change a car tire, fix your bike chain, or bake an apple pie from scratch? US TOO! Join our class and we will show you what we know and learn a few new things together. Jack of all trades, mediocre in everything, master of none.

Song Writing for Beginners - (Hampton)

Do you write poems? Do you enjoy music? In this course, we will work on songwriting from various perspectives involving lyrics/melody/chord structure, etc. We will work to develop our ideas into full songs, ready to be performed for a live audience.

Taylor Swift and Eras in History - (Dermody)

We are currently living in the era of Taylor Swift. She has been named Miss Americana and Time's Person of the Year, and her influence is shaping the collective culture of America. Through her music, Swift has reshaped fandom and popular culture, bringing people together through her fan base. She is the current voice of the youth generation, but has this type of phenomenon occurred before? What sets her apart from others? In this class, we will examine Swift's cultural, political, and historical significance within the context of American History. Using music as a lens, we will analyze common themes throughout history and explore key trends and patterns in relation to history and music. Together, we will make connections and draw conclusions to better understand the current Taylor Swift phenomenon. Ultimately, we will attempt to answer the question: Why does Taylor Swift matter in this moment of history? It will be a Cruel Summer!

UB Summer Video Shoot - (Caron)

We will have a hoot on this video shoot! You will create THE summer UB video! Looking for UBers who want to show off their creative sides and send out some good vibes! This will be a great experience that you'll never forget! *May offer both "Intro" and "Advanced" sections of this class for those who are new to video editing, as well as for those who may have taken this course previously. All welcome!*

Ukulele Ensemble - (Hampton)

Get your heart pumping and your mind off anything other than strumming a ukulele. Participants with little to no experience welcome! In this course, we will focus on music reading, ukulele techniques, as well as solo and ensemble playing. The course focuses on using music to totally immerse participants in a learning environment they might not normally experience. Ukuleles are provided – just bring your excitement to learn something new and fun!

Video Production in eSports - (Stiles)

This class will have 2 different pathways for credit, one geared towards players who want to learn how to stream, and the other for players looking for a competitive eSports experience. The eSports pathway will focus on teamwork and communication within the context of a League of Legends team and how to be mindful and healthy while gaming. The streaming pathway will show you how to create overlays, and stream in a variety of ways, again with a goal of being a positive and mindful streamer.