

# Upper School Programs



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## **2020 COLLEGE ACCEPTANCES AND MATRICULATIONS**

This college list for the Wellington Class of 2020 mirrors and celebrates the diversity found in each student's talents and interests.

American University American University of Beirut Arizona State University 🖤 Baldwin-Wallace University **Baylor University Belmont University** Berklee College of Music **Boston Conservatory** Boston University 😡 **Bowling Green State** University 🖤 **Bradley University** Bryn Mawr College 🖤 **Butler University** Capital University Carleton College 😡 Case Western Reserve University 🖤 **Clemson University Colgate University** College of Wooster 🖤 Colorado College 🖤 Columbia University 🤍 **Columbus State Community** College 🖤 **Connecticut College** Dartmouth College 🥨 Denison University 🖤 **DePaul University DePauw University Drexel University** Earlham College Eastman School of Music 🖤 Elmhurst College 🖤 Elon University 🖤 Emory University 🖤 Fairfield University Florida State University

Fordham University 🖤 Franklin & Marshall College Furman University George Washington University Grinnell College 😡 Guilford College Gustavus Adolphus College Hampton University Hiram College Hobart and William Smith Colleges Indiana University 🖤 Kalamazoo College Kent State University Kenyon College 🖤 **Knox College** Lake Forest College Lawrence Technological University 🖤 Lewis and Clark College Loyola University Chicago 🖤 Loyola University Maryland Lynn University Macalester College Manhattan School of Music Marquette University Marymount University Miami University 😡 Michigan State University Muskingum University Nazareth College New England Conservatory Northern Kentucky University 🖤 Northwestern University 🖤 **Oakland University Oberlin College** Oberlin Conservatory of Music 😡 The Ohio State University 🖤 The Ohio State University - Lima

The Ohio State University at Newark 😡 Ohio University 🖤 Ohio Wesleyan University Otterbein University 🖤 Peabody Conservatory at Johns Hopkins University Pennsylvania State University -Harrisburg Purdue University 🖤 **Ringling College of Art** and Design Roanoke College **Robert Morris University Roosevelt University** Rose-Hulman Institute of Technology 🖤 Savannah College of Art and Design 🖤 Seton Hall University Sewanee, The University of the South Skidmore College 🖤 Southern Methodist University Southwestern University Spelman College St. Louis University Swarthmore College 🕨 **Temple University Texas Tech University** The Citadel The New School **Trinity College** Union College University of Akron University of Alabama 🖤 University of Arizona University of British Columbia 😡 University of Cincinnati 🖤 University of Colorado - Boulder 🖤 University of Connecticut University of Dayton 🖤 University of Findlay 🖤 University of Houston 🥨 University of Indianapolis 🖤 University of Kentucky 🖤 University of Maryland University of Maryland, Baltimore County University of Massachusetts -Boston University of Michigan University of Minnesota University of North Texas University of Pittsburgh University of Richmond University of South Carolina 😡 University of Southern California University of Tampa University of Tennessee University of Toledo 🖤 University of Vermont University of Washington University of Wisconsin -Madison 😡 Vanderbilt University 🖤 Virginia Technical University Wake Forest University Warren Wilson College Wayne State University 🖤 Webster University Western Michigan University Williamette University Wittenberg University Wright State University Xavier University 🖤

## 2004-2020 MATRICULATIONS

Wellington students throughout the years have enrolled in colleges that are strong fits based on their individual passions and aspirations.

Adrian College Agnes Scott College Alfred University Allegheny College American University American University of Beirut American University of Rome Arizona State University Babson College Baldwin Wallace College **Bellarmine** College Belmont Abbey College **Boston College Boston University** Bowdoin College Bowling Green State University **Brown University** Bryn Mawr College **Bucknell University Butler University** California Institute of Technology California State University -Fresno **Capital University** Carleton College Carnegie Mellon University Case Western Reserve University **Central Saint Martins** Centre College Champlain College Chapman University Clemson University Cleveland Institute of Art Cleveland Institute of Music Colgate University College of Charleston College of Wooster Colorado College

Colorado State University

Columbia College Chicago Columbia University Columbia University Sciences Po Columbus College of Art and Design Columbus State Community College Connecticut College Cornell University Cornish College of the Arts Culinary Institute of America Culinary Institute of America at Greystone Dartmouth College Davidson College Denison University **DePaul University DePauw University Dickinson College** Drake University Drew University Drexel University Duke University Duquesne University Earlham College Eastman School of Music Elmhurst College Elon University **Emerson College Emory University** Eugene Lang College Florida Southern College Florida State University Fordham University Franklin Pierce College Furman University George Washington University Georgetown College Georgetown University Georgia Southern University

Grand Canyon University Grinnell College Guilford College Hamilton College Hamline University Hampshire College Hampton University Harding University Harvard University Haverford College High Point University Hobart and William Smith Hocking College Howard University Indiana University Ithaca College Ithaca College John Carroll University Johns Hopkins University Johnson & Wales University -Denver Kasturba Medical College - India Kent State University Kenyon College Korea Advanced Institute of Science and Technology Lake Forest College Lawrence Technological University Lawrence University Lehigh University Lewis & Clark College Loyola College in Maryland Loyola Marymount University Loyola University Chicago Loyola University Maryland Lynn University Macalester College Malone University Manhattanville College

Marietta College Marguette University Marshall University Massachusetts Institute of Technology Maryland Institute College of Art Messiah College Miami University Montana State University Morehouse College Mount Vernon Nazaren University Mt. Carmel College of Nursing NEOUCOM New York University Northeastern Ohio University College of Medicine Northeastern University Northern Kentucky University Northern Michigan University Northwestern University Notre Dame College Oberlin College Occidental College Ohio Northern University Ohio State University Ohio State University -College of Business The Ohio State University at Newark Ohio University Ohio Wesleyan University **OSU Medical School** Otterbein College Otterbein University Oxford of Emory University Parsons School of Design Pennsylvania State University Pratt Institute Purchase College, S.U.N.Y. Purdue University

## 2004-2020 MATRICULATIONS (continued)

Queen's University of Cananda **Reed College Regis University** Rensselaer Polytechnic Institute **Rhodes** College **Rice University Rivier** College Rochester Institute of Technology **Rollins** College **Roosevelt University** Rose-Hulman Institute of Technology S.U.N.Y. at Stony Brook Saint Joseph's University Salem International University San Diego State University Santa Clara University Sarah Lawrence College Savannah College of Art and Design School of the Art Institute of Chicago Scripps College Seattle University Sewanee, The University of the South Shawnee State University Skidmore College Smith College Southern Methodist University St. Anselm College St. Bonaventure University Stanford University Swarthmore College Syracuse University Taylor University Texas Tech University Trine University Trinity College Tufts University **Tulane University** U.S. Naval Academy United States Air Force Academy University of Akron University of Alabama University of Alaska University of British Columbia

University of California - Berkeley University of California - Los Angeles University of California - San Diego University of Chicago University of Cincinnati University of Cincinnati School of Architecture University of Cologne University of Colorado - Boulder University of Colorado - Colorado Springs University of Dayton University of Denver University of Evansville University of Findlay University of Houston University of Indianapolis University of Kentucky University of Maryland University of Miami University of Michigan University of North Carolina University of North Carolina - Wilmington University of Notre Dame University of Pennsylvania University of Pittsburgh University of Puget Sound University of Redlands University of Richmond University of Rochester University of Rochester - Eastman School of Music University of Saint Andrews University of San Diego University of South Carolina University of St. Andrews University of Tampa University of Tennessee University of Texas - Austin University of Texas at San Antonio University of Toledo University of Vermont University of Virginia University of Wisconsin - Madison

Vanderbilt University Virginia Tech University Virginia Polytechnic University Wabash College Wake Forest University Washington & Jefferson College Washington University Wayne State University Wellesley College Wesleyan University West Virginia University Westmont College Wheaton College Wheaton College - Massachusetts Williams College Wilmington College Wingate University Wittenberg University Wofford College Wright State University Xavier University Yale University

## **COURSE LOAD**

All students are required to carry a *minimum* of five (5) regularly-scheduled courses each marking period, although it is recommended that students enroll in at least six (6) courses each trimester. Note that this means each student may have at *most* three (3) free periods.

The 9th and 10th grade years include classes in every department with almost all teachers. Students are exposed to a variety of teaching styles while learning the foundations in a variety of academic disciplines.

#### Sample Courseload - 9th grade

<b>English 9</b>			<b>World Language</b>
Public speaking and research course. Integrated with World History			Latin, French, or Spanish
<b>World History</b>			<b>Mathematics</b>
Public speaking course. Integrated with English 9			Depending on placement
Students learn the sto	Foundations of Physical and Biological Science I Students learn the story of the universe: energy (physics) led to chemical reactions (chemistry) that spawned life (biology).		<b>Free Period</b> (at least one required)
Writing 9 Creativity and design courseStudio ThinkingPhysical Education			Performing Arts   Computer Science   Other electives

#### Sample Courseload - 10th grade

<b>English 10</b>			<b>World Language</b>
Research course. Three Trimesters: Book Club, 1920s, Drama			Latin, French, or Spanish
US History			Mathematics Depending on placement
Foundations of	Foundations of Physical and Biological Science II		Free Period
Biology	Biology Chemistry Physics		(at least one required)
Writing 10 Lifetime Health Computer Science   Dedicated writing curriculum Lifetime Health Essentials or		<b>Essentials or</b>	Performing Arts   Visual Arts   Computer Science   Entrepreneurship Other electives

#### Sample Courseload - 11th & 12th grades

The foundational 9th and 10th grade years launch students into courses of their own choosing in 11th and 12th grade. They take the required College Composition, the third trimester of our dedicated writing curriculum, during their junior year. Otherwise, students choose from over 125 courses to design a schedule that balances, supports, and challenges them in areas of personal interest.

<b>College Comp.</b> Research course	je Comp. Introduction to Astronomy		Podcast Journalism Research and public speaking course	Personal Finance	<b>Geometry, Art and</b> <b>Architecture</b> Interdisciplinary visual arts and mathematics
Advanced Economics Research, interdisciplinary history, and mathematics course			Inde	ependent Science Rese Research course	arch (ISR)
	Honors Precalculus			Advanced Chemist	ry
	Band			Electricity and Magnetism	Biography of Cancer
	Honors Spanish IV			Nutrition	<b>Spanish: La Gastronomie</b> Hispania Global Course
Sports Performance Traninig	Science of Sustainability	Government	Differential Calculus	Integral Calculus	Calculus-Based Statistics
Stories of the Holocaust Global course	Stories on Trial interdisciplinary English, and history course	Music and Literature Research course	Yoga	Literature and Philosophy	<b>Speech</b> Public speaking course

## ADVANCED/HONORS COURSES

To assist students in selecting courses of appropriate challenge, faculty pre-approve students for particular advanced and honors courses. Guidelines used when considering a student's qualifications for specific honors courses are found in each course description. Advanced courses are designed to challenge students capable of advanced study. The courses are intended to present college-level work in high school. Compared to many other upper school courses, advanced courses require additional outside work and higher-level critical thinking. In consideration of the difficulty of advanced courses, students should consult with advisors before enrolling in more than three advanced courses. The guidelines used when considering students' qualifications for advanced courses are as follows:

COURSE	PREREQUISITES	OTHER REQUIREMENTS
Advanced Chemistry	Foundations of Physical and Biological Sciences I & II; Algebra II or Honors Algebra II	Department approval
Advanced Physics Foundations of Physical and Biological Sciences I & II; Calculus, Advanced Calculus or concurrent enrollment in either		Department approval
Advanced Biology	Foundations of Physical and Biological Sciences I & II	Department approval
Advanced Psychology & Neuroscience	Foundations of Physical and Biological Science I & II US History	Department approval
Advanced American Studies	US History	Department approval
Advanced Economics	US History and Precalculus	Department approval
Advanced Studio Art and Design	3 trimesters of Visual Arts courses	Department approval
Advanced French V	Honors French IV	B in Honors French IV; Department approval
Honors French IV	French Intermediate B	B in French Intermediate B; Department approval
Advanced Latin	3 trimesters of Latin courses	B in Trimester Latin courses; Department approval
Advanced Spanish V	Honors Spanish IV	B in Honors Spanish IV; Department approval
Honors Spanish IV	Spanish Intermediate B	B in Spanish Intermediate B; Department approval
Advanced Musical Studies	3 years of musical background	Department approval
Advanced Calculus I	Honors Precalculus	Department approval
Advanced Calculus II	Advanced Calculus I	Department approval
Advanced Statistics	Precalculus	Department approval
Honors Precalculus	Honors Algebra II	Department approval
Honors Algebra II	Geometry	Department approval

# ADDING AND DROPPING COURSES

Advisors provide scheduling guidance for advisees based on a variety of factors, including recommendations made by faculty members. Students may freely add or drop a course no later than four days into the trimester for trimester courses, or two weeks into the start of the year for year-long courses. Year-long advanced classes may be dropped until the midpoint of the first trimester. After the add/drop period, students may withdraw from courses after discussing the decision with the course teacher, the advisor, a college counselor, and the academic dean. Dropping and withdrawing from courses has many ramifications, with respect both to Wellington and to the college application process. A student typically may withdraw from a course, earning a "W" for the trimester, up until one week after interims are published. Between that time and the end of the trimester, a student will earn the grade that is merited for that trimester. In year-long courses, a student may request to drop/withdraw from the course again up until one week after interims.

If a student withdraws from an honors course to take the non-honors version of the same course for the remainder of the year, the student will earn a "W" for zero credits in the honors course and a grade for the full credit in the non-honors course. The grades earned in the honors course subsequent to the withdrawal are averaged into the non-honors course final grade average. Although it is not common, there are instances in which faculty tweak their course recommendations after the add/drop period has concluded. This may occur through the first trimester in which a student is enrolled in a course.

## LEAP DAYS learning, exploration, and projects

As the needs of the world evolve, schools must reach beyond traditional learning and develop strategies that promote autonomy, critical thinking, research, and creativity. LEAP Days have been designed to teach our students to thrive – not in yesterday's world, but in our current and future one. The schedule combines coursework and advisory with opportunities to develop through constructive adversity. As students move through the upper school, they progressively gain autonomy to devote towards their passions and build a unique and powerful story for college admissions. LEAP Days provide skills and confidence to ensure our students are successful beyond Wellington.

#### **Morning Sessions**

The Successful Student 9	Global Engagement 10	WISE Courses (11)
Wonderlab (11)	College Counseling	Advisory

#### THE SUCCESSFUL STUDENT 9

This freshman course helps students develop the fundamental intellectual and learning tools to succeed academically in Wellington's diverse and challenging curriculum. Students explore and evaluate their skills related to executive functioning, and make reasoned and researched goals for their future. Combined with a robust advisory program that focuses on each student's social-emotional well-being, this course kickstarts a student's high school career.

PREREQUISITE: 9th Grade

COURSE DURATION: 1 Trimester, LEAP Days COURSE CREDIT: 1/3 Credit

#### GLOBAL ENGANGEMENT

Tenth grade students take this course during the third trimester in preparation for their travels abroad during 11th grade as part of the Wellington International Student Experience. They work to develop an understanding of the logistical and intellectual preparation involved in successful global travel, build intercultural communication skills, and investigate contemporary global issues and how they connect to local realities. Readings and discussions, group activities, and live and virtual guest speakers help students begin to develop their projects exploring stewardship and sustainability; human rights and conflict prevention; identity, interculturality and well-being; and innovative and social entrepreneurship.

PREREQUISITE: 10th Grade COURSE DURATION: 1 Trimester, LEAP Days COURSE CREDIT: 1/3 Credit

#### WONDERLAB

Wonderlab is a research and creative works incubator that supports student projects. In this course, students are encouraged to follow their passions and develop products that provide solutions to problems, answers to questions, and purpose to inspiration. Wonderlab helps students define areas of study, then introduces tools to navigate and execute complex and collaborative projects. This course serves as a catalyst for Senior Independent Projects, Independent Science Research, Independent Humanities Research, and Advanced Studio.

PREREQUISITE: 11th Grade

COURSE DURATION: 1 Trimester, LEAP Days COURSE CREDIT: 1/3 Credit

#### Afternoon Sessions

Wonderlab: Research opportunities, internships, student-led projects, art creation, independent studies, etc.
Engagement: Faculty office hours, math and science labs, writing workshops, college counseling, etc.
Community: Advisory, student clubs, Blue Notes, service programs, group studies, senior buddies, etc.
Scheduled Events: School concerts, school events, guest speakers, fieldtrips, PSAT, etc.

## UPPER SCHOOL SCHEDULE

In 2015 Wellington Upper School transitioned to a new schedule to enhance educational opportunity and increase student engagement. Based on best practices research, the schedule is designed to have longer class blocks, fewer transitions, a later start to the academic day, and increased flex time.

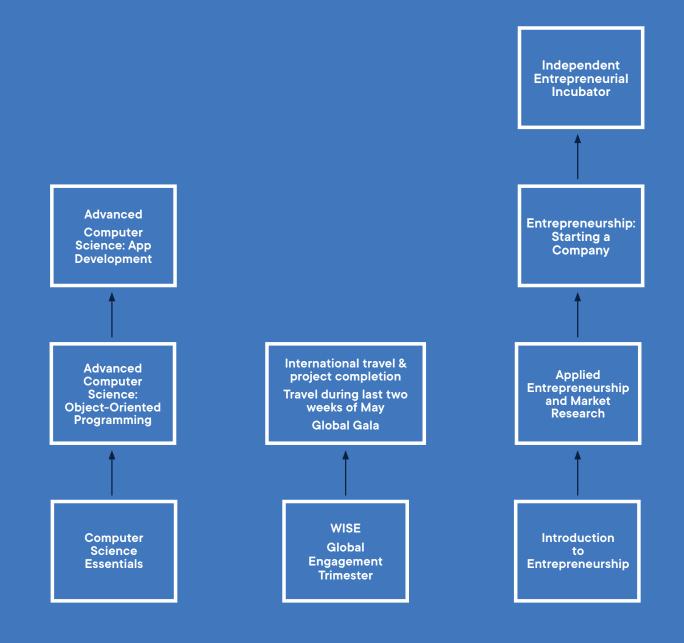
	<b>8–8:30</b> Attendance at 8:30	8:30-8:45	8:50-10:10	10:10-10:20	10:20-11:40	11:40-11:50	11:50-1:10	<b>1:10–2:10*</b> Advisory will meet each Wednesday	2:10-3:30
A	Flex/Clubs	Morning Meeting	Period 1	Break	Period 2	Break	Period 3	Lunch/Break	Period 4
в	Flex/Clubs	Morning Meeting	Period 5	Break	Period 6	Break	Period 7	Lunch/Break	Period 8

# **GRADUATION REQUIREMENTS**

(2 Credits: 1 Visual, 1 Performing)	COURSE NAMES
1 Credit Visual Art	
1 Credit Performing Art	
(4 Credits)	COURSE NAMES
1st year (1 Credit)	English 9
1st year (1/3 credit)	Writing 9
2nd year (1 Credit)	English 10
2nd year (1/3 Credit)	Writing 10
3rd year (1/3 Credit)	College Comp.
1/3 Credit English	
1/3 Credit English	
1/3 Credit English	
(3 Credits of the same World Language in the Upper School)	COURSE NAMES
1st year	
2nd year	
3rd year or three trimesters	
(4 Credits; Algebra or Geometry in 8th grade at Wellington may count as 1 credit)	COURSE NAMES
1st year	
2nd year	
3rd year or three trimesters	
4th year or three trimesters (Must include personal finance)	
(3 Credits)	COURSE NAMES
1st year (1 Credit)	World History
2nd year (1 Credit)	US History
1/3 Credit	History
1/3 Credit	History
1/3 Credit	Government
(3 2/3 Credits including Health)	COURSE NAMES
1st year 1 Credit LAB science (1/2 Biological & 1/2 Physical)	Foundations of Physical and Biological Sciences 1
2nd year 1 Credit LAB science (1/2 Biological & 1/2 Physical)	Foundations of Physical and Biological Sciences 2
3rd year or three trimesters of any LAB Science	
2nd year Lifetime Health (1/3 Credit)	
1/3 Credit any other health	
(1 Credit) (2–Sport waiver possible for 9th and 10th grade. Each waiver = 1/3 credit)	COURSE NAMES
1st year PE (1/3 Credit)	Physical Education
1/3 Credit	
1/3 Credit	
(1/3 Credit)	
2nd year (1/3 Credit)	Global Engagement Trimester
Digital Literacy (1/3 Credit)	Computer Science Essentials or Design Thinking
Research and Creative Works Incubator (1/3 Credit)	Wonderlab

# Non-Departmental

# **Non-Departmental Curriculum Progression**



#### **EXPECTED NON-DEPARTMENTAL TRIMESTER GRID**

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
Computer Science Essentials	Computer Science Essentials	Computer Science Essentials
Introduction to Entrepreneurship	Advanced Computer Science – Object-Oriented Programming	Digital Game Design
	Applied Entrepreneurship and Market Research	Entrepreneurship: Starting a Business
	Applied Positive Psychology	Emerging Independence
		Music in Film
		Queer Studies



# Wellington International Student Experience (WISE)

WISE makes international travel a reality for every Wellington student.

#### **Program Philosophy**

Meaningful international travel provides extensive educational benefits such as growth in resiliency and problem solving, while building empathy and a respect for other cultures. With increasing globalization, the development of these skills is critical for success in college and beyond. However, understanding that traditional trip experiences can be cost prohibitive for many students, we have embraced the concept of experiential equity such that the international travel experiences are built into our core upper school program, with no additional cost to tuition.

Each student will have the opportunity to undertake a long-term interdisciplinary project with ongoing faculty mentorship and interaction with community partners in Columbus and abroad. During their 10th grade year, students will be enrolled in the Global Engagement Trimester where they will work to develop an understanding of the logistical and intellectual preparation involved in successful global travel, build intercultural communication skills, and discover connections between contemporary global issues and local realities. Readings and discussions, group activities, and live as well as virtual guest speakers will help students begin to connect with one of the international projects that has been put forth by the faculty.

### Examples of some possible trip projects and locations include:

- Sustainability in Scandinavia
- $\cdot$  The history and effects of the slave trade in Ghana
- $\boldsymbol{\cdot}$  The power of storytelling with the Tandana Foundation in Ecuador
- International Business in the United Kingdom
- $\cdot$  Coral reef health and climate change in Curacao

In 11th grade students begin work on their project, making connections with the communities that they will be visiting. Students will then travel to their project destinations during the last two weeks in May, where they will fully immerse themselves in the project, creating greater understanding and gathering information and perspective in order to complete their research project or community initiative. Upon returning to Columbus, students will create presentations for our community during our Global Gala. Some students may choose to continue working on their projects during senior year, folding the project into our existing Independent Science Research or Independent Humanities Research program (see pages 22 and 41).

#### **10th Grade**

- Introduction to WISE
- Global Engagement Trimester



#### 11th Grade

- International travel & project completion
- Travel during last two weeks of May
- Global Gala

#### COMPUTER SCIENCE ESSENTIALS

Designed for the student who is interested in gaining a general computer programming background and an introduction to the concepts of computer science, this course explores the concepts of computer science and how those concepts impact our world. This course is open to any upper school student.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Credit

#### ADVANCED COMPUTER SCIENCE: OBJECT- ORIENTED PROGRAMMING

One of the most common styles of programming is object-oriented programming. In this course, students develop coding and problem solving skills in the Object-Oriented Programming paradigm. This course prepares students to develop applications for mobile platforms, games, and more.

**PREREQUISITE:** Computer Science Essentials

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Credit

#### **DIGITAL GAME CREATION**

Creating a successful game requires design, art, music, sound, and coding. This course focuses on creating a playable computer game. It is an exploration of creativity and design, so it is open to everyone whether they are a gamer or not. The complexity of the game project is tailored to the experience of the student.

PREREQUISITE: None COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 Credit

#### INTRODUCTION TO ENTREPRENEURSHIP

This introductory course to entrepreneurship gives students the opportunity to grow as an entrepreneur while exposing them to key concepts in entrepreneurship, management, marketing, finance, and business communications. In this course, we utilize a "learn by doing" method to help students develop and enhance their problem-solving and teamwork skills as they explore and approach social, economic, and environmental problems from an entrepreneurial perspective. The emphasis of this course is using the Entrepreneurial Thought & Action<sup>®</sup> methodology to explore the idea generation, opportunity identification, and evaluation phase of the entrepreneurial process. As part of this process, students gain an understanding of their personal entrepreneurial leadership capabilities and how to leverage leadership and teamwork to create economic and social value.

PREREQUISITE: None; open to sophomores, juniors, and seniors

**COURSE DURATION: 1 Trimester** 

COURSE CREDIT: 1/3 Credit

#### APPLIED ENTREPRENEURSHIP AND MARKET RESEARCH

This course looks more in-depth at the ins and outs of entrepreneurship, marketing, accounting, organizational behavior, information systems, and operations, while emphasizing the integrated role these functions have in a business. We utilize alumni, parents, and members of the community with experience in a diverse set of industries such as finance, marketing, entertainment, insurance, retail, and travel to present students with case studies dealing with ethics and problems that businesses encounter. Students work in teams on different consulting projects with real Columbus startups who present their most pressing business problem to the students. After conducting research and devising a plan, the students present their solutions directly to the business CEOs.

PREREQUISITE: None; open to sophomores, juniors, and seniors

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Credit

#### ENTREPRENEURSHIP: STARTING A COMPANY

Students work together to start their own businesses and present "Shark Tank"style to real venture capitalists. Students use Entrepreneurial Thought & Action<sup>®</sup> methodology to explore the idea generation, opportunity identification, and evaluation phase of the entrepreneurial process for their ideas. Each student pitches their idea early in the trimester and the winning presentations get started working with a team or individually on their business.. Students work through the design process and create a prototype as part of their final presentation.

PREREQUISITE: None; open to sophomores, juniors, and seniors

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 Credit

#### INDEPENDENT ENTREPRENEURIAL INCUBATOR

Each student in this course develops and launches a business in consultation with the faculty of the entrepreneurial department. Students may choose to execute the business project in conjunction with one or two other students enrolled in the incubator program, with entrepreneurial department approval. Students are expected to be a part of all aspects of launching a business. Each student must find an outside business and/or start-up expert in the field of study and will spend part of the first trimester interning. Students are required to achieve benchmarks, meet deadlines, and demonstrate core competencies throughout the year. This culminates in a presentation to members of the Wellington community. Although this class is an independent study, students are scheduled into a class period and frequently meet with other students in the course.

**PREREQUISITE:** Department approval and at least one of the trimester entrepreneurial classes

COURSE DURATION: 1 Year COURSE CREDIT: 1 Credit

#### **MUSIC IN FILM**

In this trimester course, students explore to what degree film music shapes our perception of the film narrative. The course opens with a brief history of music in film beginning with silent movies, progressing to innovative and original compositions, and ending with the insertion of pop music into films. Students participate in a "sound walk" to consider how ambient sounds impact the visual experience. They study impactful composers (including Ernst Kongold, Danny Elfman, John Williams, and Hans Zimmer) in order to learn about the techniques and concepts used to shape and support the film narrative, as well as learn about the process of recording and producing film soundtracks. Projects may include the creation of an original short film with the insertion of music, analysis of a particular film and how the music leads/manipulates the viewer, and analysis of films with music as the primary focus (such as Tommy, Sgt. Pepper's Lonely Heart Club Band, Across the Universe, and Fantasia). Guest speakers (live or via Skype) provide additional expertise for the class. This course is offered during odd numbered school years.

**PREREQUISITE:** None; Open to sophomores, juniors, and seniors

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 Credit

#### **APPLIED POSITIVE PSYCHOLOGY**

Applied Positive Psychology is designed to enable students to study and apply the concepts that lead to human flourishing, including happiness, flow, meaning, love, gratitude, accomplishment, growth, and positive relationships. Students also delve into the science behind each concept and use the Values in Action character strengths model. This course include the study of positive psychology researchers, focusing on Seligman, Csikszentmihalyi, Lyubomirsky, Frankl, and Frederickson.

PREREQUISITE: Open to juniors and seniors COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 Credit

#### **EMERGING INDEPENDENCE**

Emerging Independence is designed to help facilitate the transition from adolescence to adulthood and build responsibility by focusing on skills not currently taught in other courses. Starting with the concept of independence, students explore current and historic views and develop individual goals for the future. This course emphasizes values, goals, planning, and problem solving though a variety of activities. Course topics include personal relationships, job skills, automotive emergencies, kitchen planning, organizational skills, professional etiquette, finances, and first aid. The integration of these topics help students gain and maintain independence as they prepare for life beyond Wellington.

**PREREQUISITE:** Open to juniors and seniors

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Credit

#### GLOBAL ENGAGEMENT TRIMESTER

#### (Required for sophomores)

Tenth grade students take this course during the third trimester in preparation for their travels abroad during 11th grade as part of the Wellington International Student Experience. They work to develop an understanding of the logistical and intellectual preparation involved in successful global travel, build intercultural communication skills, and investigate contemporary global issues and how they connect to local realities. Readings and discussions, group activities, and live and virtual guest speakers help students begin to develop their projects exploring stewardship and sustainability; human rights and conflict prevention; identity, interculturality and wellbeing; and innovative and social entrepreneurship.

PREREQUISITE: None

COURSE DURATION: 1 Trimester, LEAP Days

COURSE CREDIT: 1/3 Credit

#### **QUEER STUDIES**

This introductory course guides students towards understanding the diversity of LGBTQ communities, their history, and the present conditions of sexual identity formation. Students study various topics that may include prominent figures in Queer history, exploration of fiction and nonfiction works by and about Queer authors, exposure to art and music focused on the Queer community, and other topics.

PREREQUISITE: Open to juniors and seniors

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 Credit

#### THE SUCCESSFUL STUDENT (Required for freshmen)

This freshman course helps students develop the fundamental intellectual and learning tools to succeed academically in Wellington's diverse and challenging curriculum. Students explore and evaluate their skills related to executive functioning and make reasoned and researched goals for their future. Combined with a robust advisory program that focuses on each student's social-emotional well-being, this course kick starts a student's high school career.

PREREQUISITE: None COURSE DURATION: 1 Trimester, LEAP Days COURSE CREDIT: 1/3 Credit

#### WONDERLAB

(Required for juniors)

Wonderlab is a research and creative works incubator that supports student projects. In this course, students are encouraged to follow their passions and develop products that provide solutions to problems, answers to questions, and purpose to inspiration. Wonderlab helps students define areas of study, then introduces tools to navigate and execute complex and collaborative projects. This course serves as a catalyst for Senior Independent Projects, Independent Science Research, Independent Humanities Research, and Advanced Studio.

#### PREREQUISITE: None

COURSE DURATION: 1 Trimester, LEAP DAYS COURSE CREDIT: 1/3 Credit



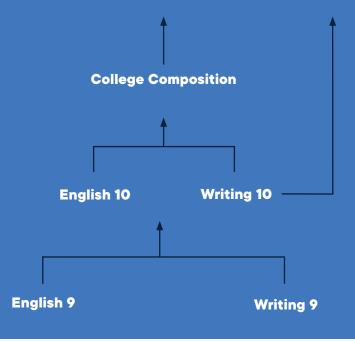
HOMAGE WAYUR

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# **English Curriculum Progression**

**Trimester Courses** 

The Afterlife	Literature of New Orleans	Spirituality in Literature
College Composition	Literature and Philosophy	Stories of the Holocaust
The Craft of Fiction	Music and Literature	Stories on Trial
The Craft of Poetry	Notable Authors: Stephen King	Sustainability: Advertising the
Great Books: Frankenstein	Notable Authors: Whitman,	Environment
Great Books: Hamlet	Dickinson, Poe	Sustainability: Art, Literature, and
Great Books: Invisible Man	Podcast Journalism	the Environment
	Radio Drama	Time Travel Literature
Greek Tragedy	Speech	Utopia/Dystopia: What a World
Literature and Film	Speech	



### **EXPECTED ENGLISH TRIMESTER GRID**

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
The Afterlife	College Composition	College Composition
College Composition	The Craft of Fiction	Great Books: Invisible Man
The Craft of Poetry	Great Books: Hamlet	Great Books: Frankenstein
Literature and Film	Greek Tragedy	Literature and Philosophy
Music and Literature	Notable Authors: Stephen King	Radio Drama
Podcast Journalism	Notable Authors: Whitman, Dickinson,	Stories on Trial
	Poe	
Stories of the Holocaust	Speech	Utopia/Dystopia: What a World We Make
Sustainability: Art, Literature, and the Environment	Spirituality in Literature	Literature of New Orleans
	Sustainability: Advertising the	
	Environment	
	Time Travel Literature	

#### **ENGLISH 9**

#### (Required for freshmen)

Wellington 9th graders interact with significant works of literature in a variety of genres including fiction, nonfiction, drama, and poetry. Students develop skills in literary analysis, research, rhetorical structure, and public speaking.

PREREQUISITE: None

COURSE DURATION: 1 Year

COURSE CREDIT: 1 English Credit

#### WRITING 9 (Required for freshmen)

Writing 9 focuses on the process of writing as thinking. Students study and respond to the work of other writers, including their classmates, as they develop their own skills and voice through multiple revisions.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English Credit

#### ENGLISH 10 (Required for sophomores)

English 10 is designed to expose students to significant works of American literature. Students continue to work on their composition skills, with some emphasis on independent writing as well as independent reading. Literature selected for English 10 supplements the students' study of American history.

PREREQUISITE: English 9

COURSE DURATION: 1 Year

COURSE CREDIT: 1 English Credit

#### WRITING 10 (Required for sophomores)

A painter considers lines, shapes, colors, and textures to create a landscape with paint; a writer must consider diction, syntax, and punctuation to create a landscape with words. In this course, students demonstrate what they learn about grammar through a variety of written assignments.

PREREQUISITE: English 9

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 English Credit

#### COLLEGE COMPOSITION (Required for juniors)

College Composition focuses on the essay, its rhetorical shape, purpose, and audience. Each student develops and perfects an ideal college essay and reviews the structure and grammar of language in order to be a clear and compelling writer. Finally, this course emphasizes media literacy, equipping students with the research skills necessary for successful college writing.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

# SUSTAINABILITY: ADVERTISING THE ENVIRONMENT

In this course, students utilize advertising techniques to raise awareness of a local environmental issue of their choice. As a class, we develop a full-scale marketing campaign, relating complex scientific information legibly through infographics, commercials, social media, and other effective means.

PREREQUISITE: English 10 COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English Credit

#### THE AFTERLIFE

Throughout time, humans have explored the question, "What happens when we die?" This course provides a study of world literature through the lens of the afterlife. Focus areas may include: Greek/Roman, Egyptian, Buddhist, Chinese, Jewish, Christian, and Muslim beliefs and texts. Students explore their own belief about what happens after life on Earth.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

#### **CRAFT OF FICTION**

In this writing workshop, students develop their own original short stories. Throughout the trimester, we explore the intricacies of fiction by reading what established writers have to say about their craft and examining published works as models. The course is for students who are motivated to write and who are interested in joining a community of other writers.

PREREQUISITE: English 10 COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

#### **CRAFT OF POETRY**

In this writing workshop, students develop their own original poems. Throughout the trimester, we explore the intricacies of poetry by reading what established writers have to say about their craft and examining published works as models. In addition to reading and writing poetry, students memorize and recite poems. The course is for students who are motivated to write and who are interested in joining a community of other writers.

PREREQUISITE: English 10 COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

#### **GREAT BOOKS: FRANKENSTEIN**

What does it mean to be human? Students address this question using Mary Shelley's classic work, along with related texts, film adaptations, and modern versions of the story. Time is also spent discussing the nature of science and literature, what it means to be a monster, and how these questions tie in with modern genetics.

PREREQUISITE: English 10 COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

#### **GREAT BOOKS: HAMLET**

"Hamlet" is considered by many to be Shakespeare's greatest play, and actors all around the world view the character of Hamlet as the ultimate role. This course focuses on not only the Bard's original play, but also several contemporary works of literature and film based on "Hamlet." Students practice close literary analysis and use a variety of written assignments, projects, and dramatic performances to construct meaning from the text.

PREREQUISITE: English 10 COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

#### **GREAT BOOKS: INVISIBLE MAN**

The narrator in Ralph Ellison's "Invisible Man" chronicles his journey as a black man from the deep South to the streets and basements of Harlem. But this novel is more than one man's story of racial oppression. It is a novel full of ideas expressed in luminous prose that resonates with the modern reader. Students practice close literary analysis and use a variety of written assignments, projects, and group activities to construct meaning from the text.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English Credit

#### LITERATURE OF NEW ORLEANS

Students study the poetry, fiction and nonfiction writing, and music of New Orleans. Course content emphasizes the rich history of one of America's most unique and diverse cities. Students address a variety of literary themes through their own narratives.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English Credit

#### **GREEK TRAGEDY**

Students study a variety of Greek tragedies, noting their historical significance, as well as their influence on modern drama. Titles may include "Oedipus Rex" (Sophocles), "Antigone" (Sophocles), "Iphigenia at Aulis" (Euripides), and "The Trojan Women" (Euripides). Students also study the history of Greek theatre, including the origins and development, as well as the Festival of Dionysus.

PREREQUISITE: English 10 COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

#### SUSTAINABILITY: ART, LITERATURE, AND THE ENVIRONMENT

In this interdisciplinary course, students learn about positive environmental practices while reflecting on their own impact on the earth. Students learn about artists and writers who blur the boundaries between the humanities and science through poetry, essays, two- and threedimensional drawings, paintings, sculptures, and installations. Each student has the opportunity to choose a topic to research and connect to a larger creative piece to be completed throughout the trimester. The course concludes with a group exhibition and presentation to the public showcasing their work.

PREREQUISITE: English 10 COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

#### LITERATURE AND FILM

What happens when a piece of literature is chosen for the big screen? In this trimester course, students read several works of literature and watch the corresponding films in an attempt to analyze this essential question. At the end of the trimester, students develop their own short film based on a selected work of literature.

PREREQUISITE: English 10 COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

#### LITERATURE AND PHILOSOPHY

How do we know that we know what we think we know? What do all true things have in common? What is the nature of existence? Do animals experience consciousness? This course seeks to answer such questions through the study of essays and short stories. Students develop an understanding of basic philosophical concepts, while also developing their own life philosophy.

PREREQUISITE: English 10 COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English Credit

#### **MUSIC AND LITERATURE**

Music and Literature examines the works of musicians as literature, while also exploring a variety of writings on music (pop, rock, folk, jazz, hip-hop), both fictional and nonfictional. Students research, write, and deliver presentations based on songs of their choice.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English Credit

#### NOTABLE AUTHORS: STEPHEN KING

In this course students study several pieces of literature from Stephen King. As a class, students read several short stories and novellas by King. Students also choose one of King's novels to read independently. For a final project, students discuss unique traits of the author (character development, themes, use of language, etc.) that have enabled him to succeed for a lengthy period of time.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English Credit

#### **PODCAST JOURNALISM**

Instead of employing traditional journalistic story structures and an institutional voice. the New Journalists of the 1960s and 70s revolutionized the way a story could be reported. By constructing well-developed characters, sustained dialogue, vivid scenes, and strong plotlines, these reporters delivered dramatically engaging stories. This style's influence can be seen in magazines across the nation, and more recently, in the popular podcasts. "This American Life" and "Radiolab." Based on our reading of key New Journalism pieces, students create their own long-form podcasts that dive deep into a subject of their choosing. In this course, students also learn how to employ discerning methods of research, how to engage with their evidence, and how to effectively use primary resources to create a compelling final product.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

#### **RADIO DRAMA**

What seemed a relic of the past, radio drama has surprisingly found a revival in the digital age. Without visuals, the art form depends entirely on vocal performance, music, and sound effects to carry the story. In this class, we review the history of radio drama, analyze specific programs for technique, as well as write, perform, and record our own live show.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English Credit or 1/3 Performing Arts Credit

#### **SPEECH**

Through illuminating and persuasive speeches, as well as discussions about current events, students explore their strengths and improve their overall communication skills. As a capstone project, students write, develop, rehearse, and deliver a speech in the style of a TED Talk.

PREREQUISITE: English 10

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 English Credit

#### **STORIES OF THE HOLOCAUST**

Major works have been created against the backdrop of one of history's darkest times. Students read both fiction and nonfiction pieces to witness the diverse stories that Nazi Germany could not silence.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English Credit

#### **STORIES ON TRIAL**

In this course, students learn the trial process through reading stories (fictional and nonfictional) and by participating in mock trials. Possible trials to examine and practice include war crimes, slander/libel, and product liability. Students focus on a range of trial procedures and why they may differ (e.g., criminal v. civil trial). This course is team taught by English and history faculty.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English or History Credit

#### TIME TRAVEL LITERATURE

If you could travel to any moment in the past, what would that moment be? In this course, students engage in the rich literature of time travel, from H.G. Wells' classic "The Time Machine" to more modern examples such as Ted Chiang's "Story of Your Life" (the basis for the movie "Arrival"). Additionally, we discuss the nature of time through the lens of philosophy and theoretical physics.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English Credit

#### UTOPIA/DYSTOPIA: WHAT A WORLD WE MAKE

What would the perfect society look like? What kind of political system would guarantee peace, prosperity, and plenty for all people? How can we harness technology for the good of all humanity? How could it all go horribly wrong? This course explores utopian and dystopian thinking in literature.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English Credit

#### **SPIRITUALITY IN LITERATURE**

The Oxford English dictionary defines spiritual as "Relating to or affecting the human spirit or soul as opposed to material or physical things." All perspectives on religion are welcome in this course, and students study where others have found inspiration in literature. Students also apply spiritual practices to a variety of secular texts, exploring works of literature that might inspire their own kind of spirituality.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

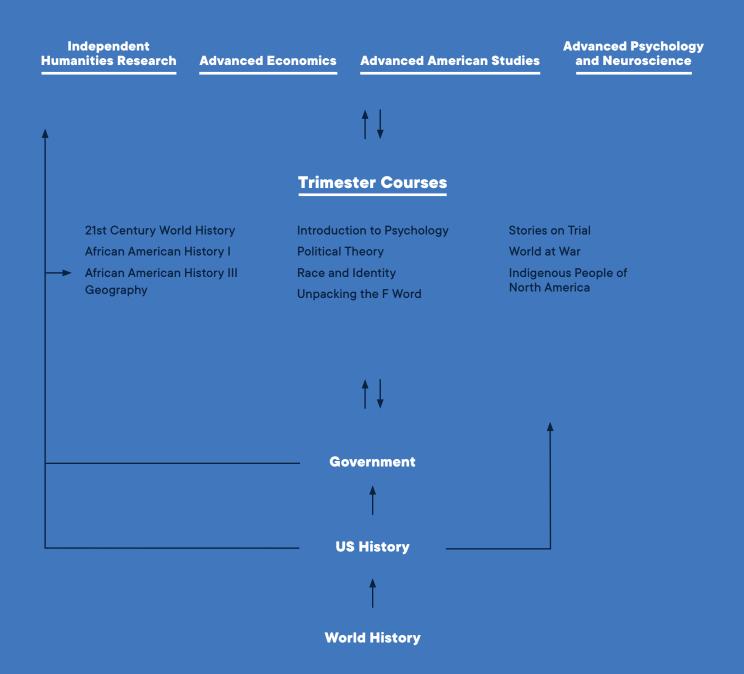
#### NOTABLE AUTHORS: WHITMAN, DICKINSON, POE

Each of these poets boasts a distinct poetic voice. This course examines the styles that represent these writers and the ways in which their work helped to shape the 19th century literary landscape. Throughout the course, students also explore a number of contemporary American poets whose work has not received the attention that it deserves.

PREREQUISITE: English 10 COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

# History/ Social Studies

# **History/Social Studies Curriculum Progression**



#### **EXPECTED HISTORY TRIMESTER GRID**

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
Government	Government	Government
World at War	Unpacking the F Word	Indigenous People of North America
Introduction to Psychology	African American History I	Stories on Trial
21st Century World History	Race and Identity	Geography
African American History III		Political Theory

#### **WORLD HISTORY**

#### (Required for freshmen)

World History is designed to involve students in the development of world cultures from the beginnings of the 16th century through the present. It provides students with an understanding of the crucial ideas and events which lay the foundation for the modern world. This course is required for graduation.

#### PREREQUISITE: None

COURSE DURATION: 1 Year

COURSE CREDIT: 1 History Credit

#### **US HISTORY**

#### (Required for sophomores)

US History is a survey course of the United States from colonial times to the present. It is designed to provide students with an understanding of the key ideas and events that shaped the development of the United States. This course is required for graduation.

PREREQUISITE: World History

COURSE DURATION: 1 Year

COURSE CREDIT: 1 History Credit

#### **ADVANCED AMERICAN STUDIES**

Advanced American Studies is designed to be college-paced and include major assessments focused on advanced analytical writing and student-created projects. In addition to the thematic approach to the study of American history, the course is centered on a cultural examination of life in America.

**PREREQUISITE:** US History; Open to juniors and seniors

#### COURSE DURATION: 1 Year

COURSE CREDIT: 1 Credit (2/3 History Credit and 1/3 English Credit)

#### GOVERNMENT

#### (Required for graduation)

The US government is the focus of the course and study includes examination of the Constitution, governmental philosophies, federalism, the interplay of the three branches of government, and the civic roles of Americans.

PREREQUISITE: US History

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 History Credit

#### **ADVANCED ECONOMICS**

Advanced Economics is designed to give students a more in-depth understanding of macroeconomic and microeconomic principles. We examine these topics by considering recent developments in economic theory and policies. The class is team-taught in a seminar fashion by math and history faculty members. There is a final project-based research study of an advanced topic. Final topics might include sustainable growth, tax reform, supply side economics, labor organizations, national industrial policy, ethical responsibility of business, and social entrepreneurship.

PREREQUISITE: US History and Precalculus

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Credit (2/3 History Credit, 1/3 Math Credit)

#### ADVANCED PSYCHOLOGY AND NEUROSCIENCE

Psychology is a broad discipline with ties to both the social and natural sciences. As such, this course is taught by both science and humanities faculty. Advanced Psychology and Neuroscience introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. To fully understand psychology and behavior, it is critical to have a thorough understanding of the physical and biological processes occurring within the brain. The first trimester focuses on the chemical, molecular, electrical, and cellular neurobiology and how these physical processes within the brain manifest in complex human behavior. The second and third trimesters then build upon the biological basis of neuroscience to further explore psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Ultimately, students utilize the knowledge gained from the course to research and present on a recent psychological study with a focus on the ethics and methods psychologists use in their science and practice.

PREREQUISITE: Foundations of Physical and Biological Science I and II; US History

COURSE DURATION: 1 Year

COURSE CREDIT: 1/3 Biological Science Credit, 1/3 History Credit, 1/3 Credit

MEETS LABORATORY SCIENCE REQUIREMENT: Yes (1/3)

#### INDEPENDENT HUMANITIES RESEARCH (IHR)

Students in this course develop and implement a humanities related research project. Students are expected to be a part of experimental design, investigation, and information analysis. Each student seeks out an outside expert in the field of their study. Students are required to achieve research benchmarks, meet deadlines, and demonstrate core competencies throughout the year including the writing of an extensive research paper on their topic, culminating in a presentation to members of the Wellington community. Although this class is an independent study, students are scheduled into a class period and meet periodically with faculty and others in the class. The first trimester has regularly scheduled meetings that focus on qualitative research methods, while the second and third trimesters are focused on implementing the project.

PREREQUISITE: Department approval

COURSE DURATION: 1 Year

**COURSE CREDIT:** 1 Credit (2/3 History Credit and 1/3 English Credit)

#### **21st CENTURY WORLD HISTORY**

This course is designed to involve students in the recent development of world cultures in the context of 21st century global interconnectedness. This course provides the students with an understanding of the crucial ideas and events which establish the social, political, and economic issues in today's world.

PREREQUISITE: US History

COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 History Credit

#### **AFRICAN AMERICAN HISTORY I**

African American History I highlights African American influence on the grand narrative of American history, from the beginnings of race-based slavery in the Western Hemisphere through Reconstruction. Students tap into a growing repository of scholarly resources and wrestle with the challenges inherent in tracing nontraditional historical narratives.

PREREQUISITE: US History

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 History Credit

#### **AFRICAN AMERICAN HISTORY III**

This course explores themes related to African American history from the birth of the modern civil rights movement to present. Beginning with the March on Washington Movement that led to reforms in federal employment practices at the start of World War II, this course follows the growth of the civil rights movement through the actions of local grassroots organizations and examines the ways the movement changes focus after the passage of major civil rights legislation in the 1960s. The course continues to track the undeniable African American influence on popular culture through music and television, and connects modern rights movements such as Black Lives Matter to their precursors.

PREREQUISITE: US History

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 History Credit

#### **UNPACKING THE F WORD**

This course examines women's lives throughout American history, placing them at the center of our interpretation. We consider the social, political, cultural, and economic histories of women in the United States, paying attention to how women have played active roles in shaping American history and society. We contemplate primary sources and cultural evidence including novels, music, art, and film throughout the course. The course is designed to ultimately consider the idea of feminism and "unpack the F word" by following the evolution of the word itself along with the movements surrounding feminism.

PREREQUISITE: US History

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 History Credit

#### GEOGRAPHY

Geography is designed to expand knowledge of the physical, political, cultural, and economic geography of the world. Students study people, places, and environments at local, regional, national, and international levels from various perspectives of geography.

PREREQUISITE: US History

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 History Credit

#### INTRODUCTION TO PSYCHOLOGY

This course is designed to introduce students to the content, terminology, methodology, and application of the study of psychology. This course highlights interesting and influential experiments within the field of psychology and their implications on our understanding of human behavior.

PREREQUISITE: US History COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 History Credit

#### **POLITICAL THEORY**

Political Theory is designed to build a solid understanding of western political theory from classical times to the present. It presents a framework for understanding the political, economic, and social issues in today's world. Particular emphasis is placed on students developing and articulating their own political philosophy.

PREREQUISITE: US History

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 History Credit

#### **RACE AND IDENTITY**

Race and Identity is designed to encourage critical thought and expand knowledge concerning issues about race and identity in a global context. Students study how race impacts social behavior. We look at the origins of the concept of race, and the development, organization, and impact on economic and political institutions through history with an emphasis on today's world.

PREREQUISITE: US History

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 History Credit

#### **STORIES ON TRIAL**

In this course, students learn the trial process through reading stories (fictional and nonfictional) and by participating in mock trials. Possible trials to examine and practice include war crimes, slander/libel, and product liability. Students focus on a range of trial procedures and why they may differ (e.g., criminal v. civil trial). This course is team taught by English and History faculty.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English or History Credit

#### THE WORLD AT WAR

The World at War focuses on World War I and World War II; the causes of these global conflicts, the events and experiences of the wars, and the consequences of the wars.

PREREQUISITE: US History

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 History Credit

#### INDIGENOUS PEOPLE OF NORTH AMERICA

Students study the diverse experiences of the indigenous peoples of North America through history, literature, film and various mediums. This course provides a foundation for participation in the WISE trip, "First Nations: Heritage and Tradition in the 21st Century" to Vancouver, Canada. Students take a "backwards" approach to studying history by identifying contemporary events and conducting research to understand their origins. This course explores the questions: How have the indigenous people of North America survived and endured? How do countries reconcile their colonial pasts? How are the experiences of indigenous American people memorialized or forgotten? Who are First Nations people today? What are indigenous conceptualizations of land and resource use and how do they fit back into the capitalist world? In addition to numerous supplementary resources, the course uses "An Indigenous Peoples' History of the United States" by Roxanne Dunbar-Ortiz as a foundational text.

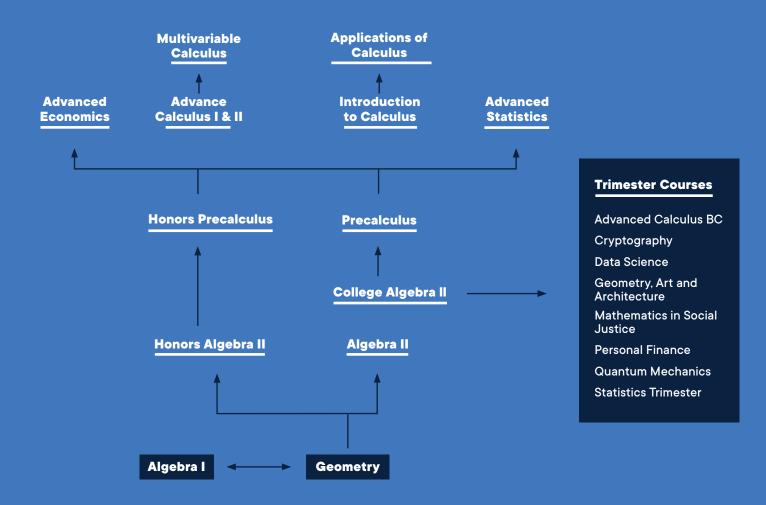
PREREQUISITE: US History COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 History Credit

# Mathematics

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# **Mathematics Curriculum Progression**

4 years are required



#### **EXPECTED MATHEMATICS TRIMESTER GRID**

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
Cryptography	Mathematics in Social Justice	Geometry, Art, and Architecture
Personal Finance	Personal Finance	Statistics Trimester
Quantum Mechanics		Personal Finance
		Data Science

#### **ALGEBRA I**

This course forms the foundation for all college preparatory mathematics courses. In this course, students review basic algebraic concepts and their applications. Among the topics covered are real number properties, equation solving with one and two unknowns, rational expressions, polynomials, radicals, graphing, and problem-solving techniques. Students learn to describe the world around them with algebraic expressions, equations, and graphs. Applications, calculators, computers, and other manipulatives provide a context for the abstract language of algebra.

PREREQUISITE: None

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Mathematics Credit

#### GEOMETRY

This course focuses on problem solving, proof, and mathematical communication in a context that further strengthens algebraic skills. The classical approach to geometry is presented, along with various methods for solving problems. Topics covered include plane geometry, constructions, deductive and inductive proof, and elementary logic. This course also includes applied algebra, ratios and proportions, area and volume, circles, and right angle and non-right angle trigonometry. Graphing calculators are not required, but a scientific calculator with trigonometric functions is required.

PREREQUISITE: Algebra I

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Mathematics Credit

There are two course options for Algebra II. If a student is unsure which course is the best fit, he or she should speak to a current math teacher.

#### **ALGEBRA II**

This course emphasizes competency and fluency with the parent functions: linear, quadratic, cubic, exponential, rational, and roots as well as their transformations, compositions, inverses, and applications are emphasized. Students study these relations and functions as tools for modeling real world situations. The course builds upon the foundation laid within Algebra I, extending concepts and underscoring the requisite skills needed to move forward into the realm of higher-level mathematics. The TI–84 Plus graphing calculator is used within the course to enhance students' understanding of each concept.

PREREQUISITE: Algebra I

COURSE DURATION: 1 Year

**COURSE CREDIT: 1** Mathematics Credit

#### **HONORS ALGEBRA II**

This is an advanced, fast-paced and challenging Algebra II class for students interested in pursuing mathematics, science, or STEM-related careers. Students use various tools (TI graphing calculator, laptop, and Desmos) to explore and solve real-world problems that require the use of Algebra Il concepts. Honors courses are intended to be more challenging than standard courses and provide multiple opportunities for students to take greater responsibility for their learning. Honors courses can be distinguished by a difference in the quality of the work rather than merely by the quantity of work. A TI-84 Plus graphing calculator is required.

**PREREQUISITE:** Department approval and A in Geometry

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Mathematics Credit

#### **COLLEGE ALGEBRA I**

This course will be a slower paced and indepth study of foundational algebra topics. This course will be a refresher course before students head into faster paced and more challenged algebra courses. The goal is to master the foundations to move into Algebra 2 topics. Upon successful completion of this course, a student could enroll in Algebra II or College Algebra II the following year. A TI–84 Plus calculator is required.

PREREQUISITE: Geometry

COURSE DURATION: 1 Year

**COURSE CREDIT:** 1 Mathematics Credit

#### **COLLEGE ALGEBRA II**

College Algebra II is a yearlong math course that focuses on the application of mathematics to real-world situations by using problem-solving skills, quantitative reasoning, and modeling techniques. The course reinforces and expands upon topics from algebra, geometry, statistics, and probability. This course is designed to promote reasoning and problem-solving skills through thematic units while requiring students to analyze unfamiliar situations and devise strategies that will lead to a solution.

PREREQUISITE: College Algebra I or Algebra II

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Mathematics Credit

#### PRECALCULUS

This year-long course consists of the following sequence of topics: trigonometry, probability and statistics, sequences and series, conics, rational functions, and a review of the functions studied thus far. This review of functions is algebraic and graphical, as well as for use in modeling various mathematical situations. This course prepares students to take calculus, statistics, or a college-level mathematics course the following year. A TI–84 Plus graphing calculator is required.

PREREQUISITE: Algebra II

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Mathematics Credit

#### **HONORS PRECALCULUS**

Honors Precalculus is specifically designed for students who plan to take advanced mathematics courses in the future. Material is covered in greater depth, at a faster pace, and from a more theoretical perspective than the regular precalculus course. This year-long course consists of the following sequence of topics: trigonometry, vectors, polar coordinates, parametric equations, probability and combinatorics, sequence and series, limits, continuity, and other introductory calculus topics. The course includes an ongoing cumulative review of functions both algebraically and graphically throughout the year. At the end of the course, students are encouraged to take the SAT Subject Test: Mathematics, Level 2.

**PREREQUISITE:** Department approval and B+ in Honors Algebra II

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Mathematics Credit

### INTRODUCTION TO CALCULUS

This two-trimester course focuses on learning how to differentiate and integrate. As the derivative represents the slope of the curve and instantaneous change, students practice finding derivatives of functions. With a solid understanding of differentiation, students begin an in-depth study of the integral. This class is intended for most college-bound seniors who expect to study business or the sciences in college. This class is comparable to the first semester of calculus in most colleges.

**PREREQUISITE:** B in Precalculus

COURSE DURATION: 2 Trimesters

COURSE CREDIT: 2/3 Mathematics Credit

#### APPLICATIONS OF CALCULUS TRIMESTER

This course is designed to use the previous trimesters of differentiation and integration to solve calculus problems. Applications of the derivative focus on economics, business, and statistics. Applications of volume, surface area, and arc length finalize the trimester's studies.

**PREREQUISITE:** Introduction to Calculus Trimesters

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 Mathematics Credit

#### **MULTIVARIABLE CALCULUS**

This yearlong course emphasizes the calculus of multi-variable systems. Working at a challenging college-level pace, students explore various topics including parametric equations, polar coordinates, vectors and surfaces, vector-valued functions, multi-variable integration and differentiation, and differential equations. Maple Math Software is used to aid in solutions, modelling and visualization of complex mathematical systems. A computer capable of running Maple Math Software is required.

**PREREQUISITE:** Advanced Calculus I and II, department approval

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Mathematics Credit

#### **ADVANCED CALCULUS I & II**

This full-year course begins with the development of differential and integral calculus and its broad practical applications involving the slope of curves, area under the curve, and volume of rotated regions. Upon completion of Calculus I topics, students then explore advanced integration techniques, convergence or divergence of infinite series (power, Maclauren, and Taylor series), and polynomial approximations of transcendental functions. Final topics of study include derivatives and integrals of parametric and polar equations. Students have the option of taking the Advanced Placement Calculus BC examination at the end of the year. A TI-84 Plus calculator is required.

**PREREQUISITE:** Department approval and an A in Precalculus or B in Honors Precalculus

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Mathematics Credit

#### **ADVANCED STATISTICS**

This full-year course provides opportunities for students to explore and make sense of real-world data, to predict patterns and trends when appropriate, and to properly collect samples and design experiments. They then explore the basics of statistical inference. Throughout the year, students complete multiple projects for which they gather their own data in an appropriate fashion, examine the data, draw conclusions from the data using statistical inference, and summarize their findings. Through projects, tests, and quizzes, students demonstrate an understanding of formal statistical language as well as the ability to explain their research to a non-statistician. Students have the option of taking the Advanced Placement Statistics exam at the end of the year.

**PREREQUISITE:** Department approval and Algebra II Honors or Precalculus

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Mathematics Credit

#### **ADVANCED ECONOMICS**

Advanced Economics is designed to give students a more in-depth understanding of macroeconomic and microeconomic principles. We examine these topics by considering recent developments in economic theory and policies. The class is team-taught in a seminar fashion by math and history faculty members. There is a final project-based research study of an advanced topic.

PREREQUISITE: US History and Precalculus

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Credit (2/3 History Credit, 1/3 Math Credit)

#### CRYPTOGRAPHY

In a global society that is increasingly PIN-protected and tech-savvy, this course enhances awareness of code making and breaking in diverse contexts. Contexts for code making and breaking range from protecting the Federal Reserve and the power arid from cyber-terrorism to writing in secret codes. This trimester course provides an overview of the field of cryptography, including a historical perspective on early systems, building to the number theoretic foundations of modern day cryptosystems. Students learn how cryptosystems are designed and study basic cryptanalysis. They are presented with real life breaches of common cryptosystems so they better understand the dangers that lurk in cryptosystem design and in the design of systems that rely on cryptography.

PREREQUISITE: Algebra II

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Mathematics Credit

## GEOMETRY, ART, AND ARCHITECTURE

This course covers topics of mathematical structure in art and architecture and can be taken for either a visual arts credit or a mathematics credit. Related topics include the construction of polyhedra, the study of Platonic solids, the golden ratio, perspective, symmetry, and pattern in art. Students study geometry in architectural structures such as the Parthenon, modern architecture, and engineering. Additionally, students use computer-assisted design software to generate their own architectural designs. The culmination of this course includes visits to architectural sites and the production of podcasts.

PREREQUISITE: Geometry

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 Mathematics or Visual Arts Credit

#### **PERSONAL FINANCE**

#### (Required for seniors)

This course is designed to provide students with opportunities to develop skills for solving real-world problems. It focuses on areas of study that address problems and applications in personal finance including financial planning, personal investing, budgeting, tax planning, real estate financing, credit management, insurance protection, and retirement planning.

PREREQUISITE: Algebra II; Open to seniors

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Mathematics Credit

#### MATHEMATICS IN SOCIAL JUSTICE

This course focuses on how mathematics can be used to create social change. This course explores income distribution, gender identity, immigration and border policies, climate change, and education. Students use a variety of skills from Algebra I, Geometry, and Algebra II to supplement the research they will conduct in this hands-on class. Each unit also has students reflect on what action steps they can take to promote social justice in their community.

PREREQUISITE: Algebra II or equivalent

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 Mathematics Credit

#### **QUANTUM MECHANICS**

Quantum Mechanics utilizes Maple Math Software to facilitate discussion and modeling of quantum mechanical systems. Quantum mechanics is the heart of the physics of the 20th and 21st centuries. This course explores the fundamental ideas of quantization and the impact of quantum systems on the modern world and ties in with concepts presented in other science courses (chemistry and physics). While Quantum Mechanics requires advanced mathematics skills including calculus and differential equations, students are able to "use" the math without needing to "do" the math by utilizing computer symbolic and modeling software.

**PREREQUISITE:** Precalculus

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Mathematics or Physical Science Credit

#### **STATISTICS TRIMESTER**

This course focuses on the science of collecting, organizing, and interpreting data. Students design experiments and interpret data through exploratory data analysis, probability and sampling distribution, and survey and experimental design. They learn how to make valid inferences based on data and to detect misleading uses of statistics. Students participate in several projects throughout the trimester. Emphasis is placed on writing valid conclusions in such a way that statisticians and nonstatisticians can understand them. A TI-84 Plus calculator is required. This course may not be taken if a student is also enrolled in Advanced Statistics.

PREREQUISITE: Algebra II

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Mathematics Credit

#### **DATA SCIENCE**

In this course, students learn about the field of data science by doing hands-on projects using Python. Students first learn about essential programming skills in Python and then they will explore how to apply these skills to real-world data sets. Students complete a variety of projects that will require them to use statistical analysis to problem solve and make conclusions.

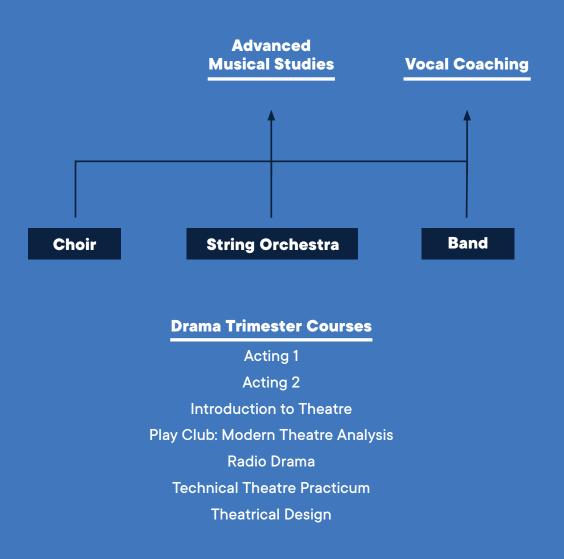
**PREREQUISITE:** Computer Science Essentials and Advanced Statistics or Statistics Trimester. Students can be concurrently enrolled in these courses.

COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 Mathematics Credit

# **Performing Arts**

# **Performing Arts Curriculum Progression**

1 year is required



#### **EXPECTED PERFORMING ARTS TRIMESTER GRID**

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
Drama – Technical Theatre Practicum	World Music	Drama – Theatrical Design
Drama – Acting 1	Drama – Acting 2	Radio Drama
Drama – Introduction to Theatre	Speech	Group Voice
Keyboard Skills	Group Voice	Drama – Play Club: Modern Theatre Analysis
Group Voice		Keyboard Skills

#### BAND

Participation in the upper school band is open to any student with at least two years of previous experience on a band instrument. The class incorporates literature from several genres, including concert band and jazz band. In addition, we focus on developing each student's capacity for technique and musicality. Concert performances are given in fall, winter, and spring. We frequently perform at area competitions and play as a pep band at several school functions throughout the year. Attendance is required for all concerts.

**PREREQUISITE:** Two years of prior experience on a band instrument or instructor approval

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Performing Arts Credit

#### **CHOIR**

Choir is open to any upper school student who expresses a desire to sing and learn basic vocal technique. Members of choir meet each class in full rehearsals with occasional sectional rehearsals on an as-needed basis. Concepts covered in class include group vocal technique, vocal production, appropriate breathing techniques, diction, building independence of vocal line, introduction to languages other than English, and stage deportment. Material covered is representative of all musical styles and genres. Members are required to perform in all regular concerts and to make occasional appearances outside of school.

PREREQUISITE: None

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Performing Arts Credit

#### **STRING ORCHESTRA**

String Orchestra is open to any upper school string player who has at least three years of experience on the violin, viola, cello, or bass. Chamber music in both large and small ensembles is explored with an emphasis on style and proper playing techniques. Attendance is required at all concerts in addition to the possibility of performing for the solo and ensemble contest. Music trips are scheduled periodically.

**PREREQUISITE:** Three years of experience on a string instrument

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Performing Arts Credit

#### DRAMA – TECHNICAL THEATRE PRACTICUM

What does it take to build and produce a theatrical production? Students will work hands on in this practical, lab-based class. Students learn technical theatre skills in the fields of scenic construction, lighting, scenic painting, sound, and much more. They learn the safe and proper way to use power tools to learn basic carpentry. We also work on elements of the current Wellington Main Stage production to acquire real-world experience. In the event that the mainstage show opens during the trimester class, students will also spend time as backstage crew for that production.

#### PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Performing Arts Credit

#### DRAMA – THEATRICAL DESIGN

This introductory theatre course is designed to enhance students' abilities to think critically, write, and create through exploring the basic question, "How and why is theatre made?" Students develop familiarity with the process of making theatre by reading and analyzing dramatic literature and exploring theatre study and the principles of design. Theatre is a fundamentally creative art; while coursework involves readings and writings, it also includes creative projects, culminating in a theatrical design of a play chosen by the class using several disciplines such as scenic, lighting, costuming, and sound design.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Performing Arts Credit

#### **RADIO DRAMA**

What seemed a relic of the past, radio drama has surprisingly found a revival in the digital age. Without visuals, the art form depends entirely on vocal performance, music, and sound effects to carry the story. In this class, we review the history of radio drama, analyze specific programs for technique, as well as write, perform, and record our own live show.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 English Credit or 1/3 Performing Arts Credit

#### ADVANCED MUSICAL STUDIES

Advanced Musical Studies is a year-long course in which students consider the world of music from several perspectives. Basic music theory is covered in the scope of the class, including melody, harmony, rhythm, ear-training, and sight-singing. Additionally, we consider music from a cultural and historic point of view. Using the season schedules of many local music organizations (Columbus Symphony, Columbus Jazz Orchestra, OSU School of Music, ProMusica, and CAPA), we focus on specific works or genres and have the opportunity to hear them performed live. This course does not fulfill the Performing Arts graduation requirement. This course is offered during even numbered school years.

PREREQUISITE: Instructor approval

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Performing Arts Credit

#### **DRAMA – ACTING I**

Acting I introduces students to the process of acting, provides a solid foundation in realistic acting technique, and aids in developing the skills for creating a role. Students learn the importance of warming up as an actor; utilize a series of exercises aimed at sharpening the imagination and emotional expression; and develop the actor skills of concentration, attention, relaxation, breathing, playing objectives, and overcoming obstacles.

PREREQUISITE: None

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 Performing Arts Credit

#### **DRAMA – ACTING II**

Acting II is a movement course designed to prepare students to learn to act. Postural habits are revealed and redirected for the student to develop grounded, centered, and dynamic body use. Various physical techniques are introduced including Suzuki, yoga, relaxation exercises, creative movement, and Laban. Through the process of exploring physical and personal awareness, students develop an aligned, expressive, and efficiently moving body that is more responsive to the needs of their imagination.

PREREQUISITE: Acting I

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Performing Arts Credit

## DRAMA - INTRODUCTION TO THEATRE

This course increases students' understanding, appreciation, and critical perceptions of the theatrical event. Through readings and lectures, we focus on the elements of theatrical practice; artists and innovators of theatre throughout history; and on the theatre's development as an art form and a social phenomenon. Optional attendance at theatrical events will offer first-hand experience in theatre arts.

#### PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Performing Arts Credit

#### DRAMA – PLAY CLUB: MODERN THEATRE ANALYSIS

This course draws upon faculty and guest artists from Available Light Theatre to explore the modern theatrical literature of the new millennium. This course includes an introduction to the dramatic theory, structure, analysis, and theatre literature. Students study a selection of diverse weekly readings and participate in class discussions.

PREREQUISITE: Open to juniors and seniors COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 Performing Arts Credit

#### **WORLD MUSIC**

Students discover traditions of music from around the world and how those traditions have impacted the music of the United States. By the end of the course, they will be able to identify examples of world music and traditionally American music (folk, jazz, etc.), and explain the purpose and origins of world music traditions and describe the carryovers to Western music. The course culminates in a practical field experience in ethnomusicology.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Performing Arts Credit

#### **SPEECH**

Through illuminating and persuasive speeches, as well as discussions about current events, students explore their strengths and improve their overall communication skills. As a capstone project, students write, develop, rehearse, and deliver a speech in the style of a TED Talk.

PREREQUISITE: English 10 COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 English Credit

#### **KEYBOARD SKILLS**

Students learn beginning piano/keyboard technique as well as beginning music theory and aural skills, including: music literacy (notes, rhythms, key signatures, time signatures), an introduction to sight singing/ reading, identifying intervals, basic chord structure (3 and 4 voice chords), and playing piano repertoire.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Performing Arts Credit

#### **GROUP VOICE**

The class focuses on helping students learn about their voice and various techniques for healthy singing and speaking. Throughout the trimester, students learn about singing, including the anatomy and physiology of the vocal mechanism, proper breath support, tone quality, intonation, diction, phrasing, and song selection. The course includes weekly classes incorporating vocal exercises, exploring various performance techniques, and singing selected repertoire. Students in this class will be expected to sing as a group and at least once as a soloist.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Performing Arts Credit

#### **APPLIED VOICE**

An intensive, one-on-one study of the voice. Intended for those pursuing further education or a career in the performing arts, or those with existing knowledge and experience in voice. The course focuses on anatomy and physiology of the singing mechanism and techniques for singing a variety of vocal music genres, with a heavy focus on repertoire and performance techniques.

**PREREQUISITE:** Group Voice or previous voice lessons, approval from instructor

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Performing Arts Credit

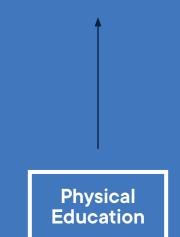
# Physical Education

# **Physical Education Curriculum Progression**

1 year of Physical Education required (or sport waiver)

# **Trimester Courses**

Conditioning and Weight Training Sports Performance Training Yoga Outdoor Physical Education



#### **EXPECTED PHYSICAL EDUCATION TRIMESTER GRID**

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
Physical Education	Physical Education	Physical Education
Conditioning and Weight Training	Conditioning and Weight Training	Sports Performance Training
Sports Performance Training	Sports Performance Training	Yoga
Outdoor Physical Education		Conditioning and Weight Training

#### **PHYSICAL EDUCATION**

#### (Required for freshmen)

Students enrolled in physical education participate in a wide variety of rigorous activities including team and lifetime sports. Team sports studied include flag football, soccer, Ultimate Frisbee, volleyball, basketball, team handball, floor hockey, indoor lacrosse, softball, and rugby, Individual and lifetime activities include disk golf, golf, tennis, physical fitness, weight training, badminton, and table tennis. Students study different types of games and activities and then research and develop their own games. Hard work, fair competition, cooperation, sportsmanship, fitness, and enjoyment of physical activity are emphasized and encouraged. Students may sign up for the trimesters in any order or combination and may repeat a trimester as many times as they wish.

#### PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Physical Education Credit

1st Trimester	2nd Trimester	3rd Trimester
Flag Football	Basketball	Table Tennis
Disc Golf	Volleyball	Kickball
Kayaking	Floor Hockey	Rugby
Ultimate Frisbee	Team Handball	Softball
Mat Ball Games	Badminton	Tennis
Physical Fitness	Tchoukball	Disc Golf
Soccer	Physical Fitness	Cricket
Speedball	Mat Ball Games	Physical Fitness
Create a Game	Create a Game	Mat Ball Games
Tennis	Curling	Create a Game
		Kayaking

### CONDITIONING AND WEIGHT TRAINING

Students are given the opportunity to learn fitness concepts and conditioning techniques used for obtaining optimal physical fitness. Students benefit from comprehensive weight training and cardiorespiratory endurance activities. Students learn the basic fundamentals of strength training, aerobic training, and overall fitness training and conditioning. This course includes both lecture and activity sessions. Students are empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.

#### PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Physical Education Credit

#### OUTDOOR PHYSICAL EDUCATION

Students study a variety of outdoor activities that are introduced at school, practiced on campus, and then taken off-campus for further experiences. Some off-campus experiences occur after school or on the weekends to allow for deeper study. The course includes lecture, lab, and activity sessions. Students need to have access to a working bicycle and a bicycle helmet. Units of study may include kayaking, bicycling, bicycling repair, geocaching, orienteering, hiking, climbing/bouldering, first aid training, CPR, sand volleyball, rip-sticking, archery, and angling or fly-fishing. Backpacking, rollerblading/skateboarding, and an overnight experience may be possible depending on the group's experience and skill. A lab fee may be required.

**PREREQUISITE:** Access to a working bicycle and bicycle helmet

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Physical Education Credit

### SPORTS PERFORMANCE TRAINING

Student athletes learn the fundamentals of strength training, plyometrics, speed, agility, flexibility, and corrective exercises. The student athletes progress through a variety of exercises performed to increase their overall body strength and linear/lateral speed. This is a hands-on course in which student athletes have the opportunity to gain enhanced athletic ability that directly transfers to the success of their sports performance.

**PREREQUISITE:** Participation in a Wellington sport or teacher approval

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Physical Education Credit

#### YOGA

This course provides students an opportunity to either experience yoga for the first time or improve their yoga practice. The benefits of consistent yoga practice complement the busy, stressful lives of adolescents. We may also visit studios in the area to experience different kinds of yoga. Each student needs a yoga mat and must wear comfortable clothing. This course may count as a Physical Education credit if a student has earned, or will earn, at least 1/3 of a Physical Education credit from a class taught by a Physical Education specialist.

PREREQUISITE: None

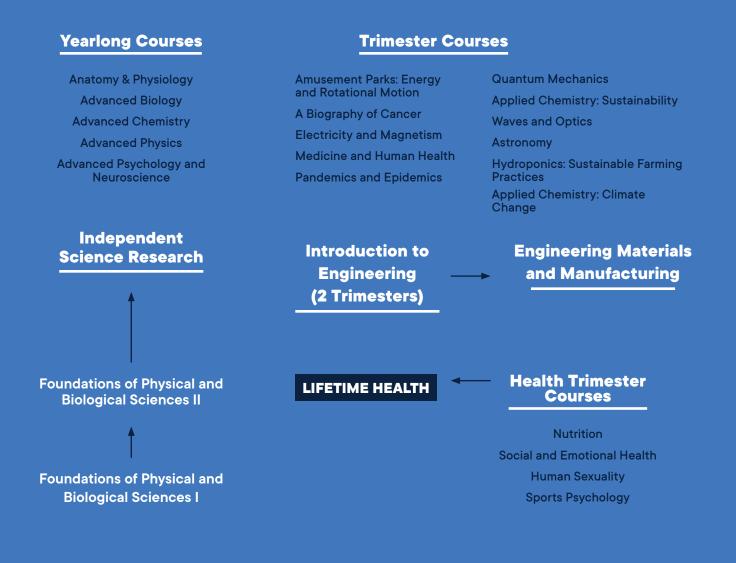
COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Physical Education Credit



# **Science Curriculum Progression**

3 years of lab sciences are required (including 1 year of biological sciences and 1 year of physical sciences)



## EXPECTED SCIENCE TRIMESTER GRID

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
Lifetime Health	Lifetime Health	Lifetime Health
Nutrition	Pandemics and Epidemics	Hydroponics: Sustainable Farming Practices
Sports Psychology	A Biography of Cancer	Human Sexuality
Quantum Mechanics	Waves and Optics	Electricity and Magnetism
Amusement Parks: Energy and Rotational Motion	Applied Chemistry: Sustainability	Medicine and Human Health
Astronomy		
Applied Chemistry: Climate Change		
Social and Emotional Health		

## FOUNDATIONS OF PHYSICAL AND BIOLOGICAL SCIENCE I

#### (Required for freshmen)

This freshman-level year-long course covers foundational topics in physics, chemistry, and biology. This course emphasizes the basic and universal physical laws that govern the structure and behavior of matter as they are expressed all around us-in the very large (astronomy) to the very small (fundamental particles, atomic structure, cellular structure), from the simple (phases of matter, solution chemistry) to the complex (evolution, genetics, ecology). Class activities include group laboratory experiments. lecture and discussion, and problem-solving sessions. Laboratory experiments are designed to instruct students on scientific research techniques and skills including observation, documentation, data analysis and evaluation, and background source evaluation and usage. This course is teamtaught by biology, chemistry, and physics teachers. Upon completion, students are eligible to take Foundations of Physical and **Biological Science II.** 

PREREQUISITE: None

COURSE DURATION: 1 Year

**COURSE CREDIT:** 1 Credit (1/2 Biological Science and 1/2 Physical Science)

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

## FOUNDATIONS OF PHYSICAL AND BIOLOGICAL SCIENCE II

#### (Required for sophomores)

This sophomore-level course is a continuation of Foundations of Physical and Biological Science I with specific topics expanding on those from the previous year. Topics include forces, energy, momentum, chemical reactions and stoichiometry. acid-base chemistry, biological molecules and organism structures and functions, heredity, and energy dynamics. This course includes topics from biology, chemistry, and physics. Class activities include group laboratory experiments, lecture and discussion, and problem-solving sessions. Laboratory experiments are designed to instruct students on scientific research techniques and skills including observation, documentation, data analysis and evaluation, and background source evaluation and usage. This course is team-taught by biology, chemistry, and physics teachers.

**PREREQUISITE:** Foundations of Physical and Biological Science I

#### COURSE DURATION: 1 Year

COURSE CREDIT: 1 Credit (1/2 Biological Science and 1/2 Physical Science)

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

## **ADVANCED BIOLOGY**

This advanced course is designed to provide an extensive exploration of major concepts in the field of biology covering the microscopic to the macroscopic. In the molecular biology unit, students learn about the Central Dogma and the genetics of inheritance. The vast field of immunology is explored during the cellular biology unit. The complexities of scientific research are taught during the student-designed plant biology lab. In addition, students engage in extensive discussions regarding the scientific processes that led to the discovery of the protein kinesin. Finally, the course discusses the big picture of biology by examining evolution, ecology, and population genetics. The course is designed to be taught at the level of an introductory college course for science majors. Advanced Biology is a continuation of the foundations developed in physics, chemistry, and biology courses. The course goals will be accomplished through lecture, class discussions, labs, and projects.

PREREQUISITE: Foundations of Physical and Biological Sciences I and II; department approval

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Biological Science Credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

## **ADVANCED CHEMISTRY**

Advanced Chemistry investigates major concepts on an introductory college level and builds upon principles covered in the foundation courses. Topics include quantum mechanics, kinetics and equilibria, thermodynamics, electrochemistry, and organic chemistry. Students are exposed to concepts explored in first-year college chemistry and beyond. The use of mathematics is extensive and a collegelevel text is used.

**PREREQUISITE:** Foundations of Physical and Biological Sciences I and II; Algebra II or Honors Algebra II; department approval

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Physical Science Credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

## **ADVANCED PHYSICS**

This rigorous course explores the topics of mechanics, electricity, and magnetism as it develops students' physical and mathematical intuition. While material from previous physics courses is reviewed, this course goes into greater depth, using calculus to model and solve realistic problems. Demonstrations and hands-on activities are used to build understanding and provide opportunities to apply knowledge. Designed as a first-year collegelevel course for science majors, Advanced Physics covers many of the topics present on the AP exam, although additional individual study is required. Each student is required to purchase his or her own textbook.

**PREREQUISITE:** Foundations of Physical and Biological Sciences I and II; Calculus, Advanced Calculus or concurrent enrollment in either; department approval

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Physical Science Credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

## ADVANCED PSYCHOLOGY AND NEUROSCIENCE

Psychology is a broad discipline with ties to both the social and natural sciences. As such, this course is taught by both science and humanities faculty. Advanced Psychology and Neuroscience introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. To fully understand psychology and behavior, it is critical to have a thorough understanding of the physical and biological processes occurring within the brain. The first trimester focuses on the chemical, molecular, electrical, and cellular neurobiology and how these physical processes within the brain manifest in complex human behavior. The second and third trimesters then build upon the biological basis of neuroscience to further explore psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Ultimately, students utilize the knowledge gained from the course to research and present on a recent psychological study with a focus on the ethics and methods psychologists use in their science and practice.

**PREREQUISITE:** Foundations of Physical and Biological Science I and II; US History

#### COURSE DURATION: 1 Year

COURSE CREDIT: 1/3 Biological Science Credit, 1/3 History Credit, 1/3 Credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

## **ANATOMY & PHYSIOLOGY**

This is a college-preparatory science course designed as an introduction for students considering careers in medicine, nursing, physical therapy, sports medicine, or education, or for any student who is just curious about the inner workings of the human body. The course covers the structure and function of major body systems including the integumentary, skeletal, muscular, digestive, cardiovascular, respiratory, nervous, endocrine, and reproductive systems. Conditions related to these body systems are also discussed. The course consists of lecture, extensive discussion, homework, guizzes/tests, and laboratory exercises (including dissection). The lab exercises are designed to provide students with hands-on opportunities to experience and understand the principles being studied.

PREREQUISITE: Foundations of Physical and Biological Sciences I & II

COURSE DURATION: 1 Year

**COURSE CREDIT:** 1 Biological Science Credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

## AMUSEMENT PARKS: ENERGY AND ROTATION MOTION

Building upon the discussion of forces from Foundations of Physical and Biological Sciences II, this course explores energy transfers and rotational dynamics. Amusement park rides serve as examples of these phenomena and allow students to draw upon their own experiences. The course begins with an overview of work and energy, considering how roller coasters are designed. Next, students explore rotational motion considering Ferris wheels and merry-go-rounds. Laboratory work, demonstrations, and numerous handson activities provide tangible examples of these topics. The course utilizes physical reasoning and algebra-based problem-solving.

**PREREQUSITE:** Foundations of Physical and Biological Science I and II; Algebra II or Honors Algebra II

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Physical Science Credit

MEETS LABORATORY SCIENCE REQUIREMENT: Yes

## **ASTRONOMY**

This course provides a broad overview of several topics in modern astronomy. First, it provides a historical perspective and understanding of celestial observation. Next, it examines our solar system: how it formed, the objects it contains, and the rules that govern it. Finally, it zooms out to consider the large scale structure of the universe. A primary focus is on how astronomical theories and models were developed. Algebra is used when we discuss the physical laws supporting these theories.

**PREREQUISITE:** Foundations of Physical and Biological Science I and II; Algebra II or Honors Algebra II

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Nondepartamental Credit

MEETS LABORATORY SCIENCES REQUIREMENT: No

## **A BIOGRAPHY OF CANCER**

A Biography of Cancer draws inspiration from Dr. Mukherjee's Pulitzer Prize-winning book, "The Emperor of All Maladies: A Biography of Cancer." The curriculum includes the history of cancer from its discovery to the current state-of-theart prevention, diagnosis, and treatment. It also tackles the social and economic climates that both supported and deterred cancer research and treatment advances, which may appeal to humanities students. Scientifically, the course covers the biology and chemistry of the disease; the biology, chemistry, and physics of diagnosis and treatment, and the role of prevention.

**PREREQUISITE:** Foundations of Physical and Biological Sciences I and II

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Biological Science Credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

SPORTS PSYCHOLOGY

Sports Psychology is designed to provide students with an understanding of the theoretical structure that underlies psychology as it has been applied to sport. Various mental training skills that can enhance one's athletic performance are also covered. Other areas of exploration include stress, motivation, goal-setting, leadership, and imagery.

**PREREQUISITE:** Open to juniors and seniors

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Health Credit

MEETS LABORATORY SCIENCES REQUIREMENT: No

## **ELECTRICITY AND MAGNETISM**

Electricity and Magnetism provides an overview of classical electromagnetism. It begins by exploring the nature of charge, electric fields, and electricity. Simple circuits and household wiring are considered. Next, the nature of magnetism is investigated, examining magnetic fields, magnetic forces, electric motors, and electric generators. A brief detour is taken into modern electricity production and transmission. Laboratory work, demonstrations, and numerous handson activities provide tangible examples of these topics. The course utilizes physical reasoning and algebra-based problem-solving.

**PREREQUISITE:** Foundations of Physical and Biological Sciences I and II; Algebra II or Honors Algebra II

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Physical Science credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

## **HUMAN SEXUALITY**

Human Sexuality is designed to help seniors with the transition to the dynamic environment of college and beyond. The course helps navigate increased personal freedom by focusing on various aspects of human sexuality. Topics such as decision making, personal responsibility, and appropriate behaviors are explored, as they are relevant to maintaining or improving personal health. Topics may include: gender and sexuality issues, dating violence, social norms, emotions, orientation, impact of the media, cultural perspectives, historical views, contraception, and diseases. This seminar-style course embraces multiple perspectives, including those of students, faculty, and parents.

PREREQUISITE: Open to seniors COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 Health Credit

MEETS LABORATORY SCIENCES REQUIREMENT: No All students are required to take Lifetime Health and one additional trimester of health credit.

## LIFETIME HEALTH

#### (Required for all students)

Lifetime Health examines the physical, mental, social, emotional, and behavioral aspects of health and wellness in today's society. Students explore the role of behavior change, decision-making, nutrition, physical fitness, mental health, drugs, alcohol, and human sexuality in consideration of decisions made striving for a healthy lifestyle. Activities and projects are used to relate and apply concepts to help develop positive lifestyle behaviors as well as to examine current health and wellness topics in our society.

PREREQUISITE: None

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 Health Credit

MEETS LABORATORY SCIENCES REQUIREMENT: No

### **MEDICINE AND HUMAN HEALTH**

Biology is best explained and understood through the lens of evolution. Medicine and human health is no exception. This course examines major health trends and diseases, such as antibiotic-resistant bacteria. diabetes, and osteoporosis, through the lens of evolution. By understanding the difference between the world in which humans evolved and the world human societies have created today, one can explain how many of the health concerns today can be understood as "evolutionary mismatch diseases." For a final project, students present on a disease of their choice, discussing the mechanism of the disease and explaining its emergence due to changes in human lifestyle practices.

PREREQUISITE: Foundations of Physical and Biological Sciences I and II

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Biological Science Credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

### **NUTRITION**

Nutrition is an introduction to nutrients and sources, digestive and metabolic processes, and the health impact of nutrient deficiencies and excesses. Discussion incorporates the relationships between food, nutrition, health, culture, and the environment. Environmental issues include world food supply and choices, food access and security, agriculture and production, and food safety. Essentials of human nutrition that improve and sustain optimal performance for sport and exercise are also emphasized.

**PREREQUISITE:** Open to sophomores, juniors, and seniors

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Health Credit

MEETS LABORATORY SCIENCES REQUIREMENT: No

#### PANDEMICS AND EPIDEMICS

This course covers various major pandemics and epidemics (Black Plague, Columbian Exchange, influenza, malaria, etc.) from biological and historical perspectives. The course primarily focuses on the biological mechanisms and epidemiology of diseases, augmented by lectures covering the historical contexts and impacts surrounding these diseases. Students then mirror this framework in their final assessment covering a disease of their choice.

PREREQUISITE: Foundations of Physical and Biological Sciences I and II

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Biological Science credit

MEETS LABORATORY SCIENCES REQUIREMENT: No

## APPLIED CHEMISTRY: CLIMATE CHANGE

Global warming and climate change are topics that are in the news on a regular basis. They are more than buzzwords, however. Our world requires its human residents to be knowledgeable about the environment to better guide government, economic, and social policy. This course introduces students to the complex issue of climate change. In addition to a basic overview of atmospheric science, students also explore the climate system and how various drivers push on the equilibria of its various mechanisms. The current climate is explored in context of paleoclimates, and models are explored to project what awaits earth's inhabitants in the future. In addition to working with climate data, students also learn about the methods being used to study climate - past, present, and future.

**PREREQUISITE:** Foundations of Physical and Biological Science I and II

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Physical Science Credit

MEETS LABORATORY SCIENCE REQUIREMENT: Yes

## APPLIED CHEMISTRY: SUSTAINABILITY

Sustainable development is defined in the United Nations' 1987 Bruntland Report, Our Common Future, as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This course introduces the concepts of sustainability. Students learn about the long-term economic and environmental necessity of reimagining our society and identify the concerns and growing pains associated with change. This course is primarily designed for those students who will participate in the junior year WISE trip, Sustainability in Scandinavia. Students make connections with business and scientific leaders in Columbus, Copenhagen, and other locations to learn more about the cultural and economic factors that might make a sustainable model easier to pursue in one region over another. Students also learn about the sustainability programs that are already in place in the Central Ohio community, as well as ways in which they can play a role.

**PREREQUSITE:** Foundations of Physical and Biological Science I and II

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 Physical Science Credit

MEETS LABORATORY SCIENCE REQUIREMENT: Yes

# SOCIAL AND EMOTIONAL HEALTH

This course is an introduction to the scientific study of behavior with a focus on social and emotional health and development. Typical topics surveyed include the study of the brain, mental states, emotional response and regulation, perception, learning, thinking, motivation, social development, technology, and psychological disorders. Additionally, this course enhances critical thinking skills by acquainting students with fundamental research techniques and discussions of literary works based upon fundamental social and emotional issues.

**PREREQUISITE:** Open to sophomores, juniors, and seniors

COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 Health Credit MEETS LABORATORY SCIENCES REQUIREMENT: No

## **WAVES AND OPTICS**

Waves and Optics explores the nature of waves. The course begins with an overview of waves, looking at the behavior of water waves and physical waves found in earthquakes. Next, sound waves and the production of musical sounds are investigated. Finally, light waves and their associated phenomena are examined, such as mirrors, prisms, lenses, and the human eye. Laboratory work, demonstrations, and numerous hands-on activities provide tangible examples of these topics. The course utilizes physical reasoning and algebra-based problem-solving.

**PREREQUISITE:** Foundations of Physical and Biological Sciences I and II; Algebra II or Honors Algebra II

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Physical Science credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

## INDEPENDENT SCIENCE RESEARCH (ISR)

Each student in this course develops and implements a research project in consultation with the faculty of the science department. Students may choose to execute the research project in conjunction with one or two other students enrolled in ISR, with science department approval. Students are expected to be a part of experimental design, data collection, and data analysis. Each student must find an outside research expert in the field of study. Students are required to achieve research benchmarks, meet deadlines, and demonstrate core competencies throughout the year. This culminates in a presentation to members of the Wellington community. Although this class is an independent study, students are scheduled into a class period and frequently meet with other students in the course.

PREREQUISITE: Department approval

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Laboratory Science Credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

## **QUANTUM MECHANICS**

Quantum Mechanics utilizes MATLAB to facilitate discussion and modeling of quantum mechanical systems. Quantum mechanics is the heart of physics in the 20th and 21st centuries. This course explores the fundamental ideas of quantization and the impact of quantum systems on the modern world and ties in with concepts presented in other science courses (chemistry and physics). While Quantum Mechanics requires advanced mathematics skills including calculus and differential equations, students are able to "use" the math without needing to "do" the math by utilizing computer symbolic and modeling software.

**PREREQUISITE:** Precalculus

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Mathematics or Physical Science Credit

MEETS LABORATORY SCIENCE REQUIREMENT: Yes

## INTRODUCTION TO ENGINEERING

This course presents a survey of a range of engineering skills, fundamentals, and career opportunities. Topics include Computer Aided Design (CAD) and 3D printing, computer applications in engineering, basic engineering mechanics, basic circuits, and electronics. Students are introduced to a systematic approach to engineering problem solving.

**PREREQUISITE:** Foundations of Physical and Biological Science I and II; Algebra II or Honors Algebra II

**COURSE DURATION: 2 Trimester** 

COURSE CREDIT: 2/3 Physical Science Credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

## ENGINEERING MATERIALS AND MANUFACTURING

Engineering Materials – what things are made of – are at the core of every engineering discipline. This class explores the structures, properties, and testing methods for engineering materials, as well as the manufacturing processes used to create useful products from these materials.

PREREQUISITE: Introduction to Engineering

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Physical Science Credit

MEETS LABORATORY SCIENCE REQUIREMENT: Yes

# ENGINEERING DESIGN AND ROBOTICS

This class is a formal introduction to engineering design thinking and robotics. It introduces many of the skills necessary to contribute to the Wellington First FTC robotics team, including Computer Aided Design, 3D printing, programming, circuits, and building skills. Students construct their own robots and participate in a series of design challenges. Class taken PASS/FAIL.

#### PREREQUISITE: None

COURSE DURATION: 1 Trimester, LEAP Days

COURSE CREDIT: 1/3 Physical Science Credit

MEETS LABORATORY SCIENCE REQUIREMENT: Yes

## HYDROPONICS: SUSTAINABLE FARMING PRACTICES

This course is an introductory level course in hydroponics and aquaponics for students considering careers in climatology, environmental science, horticulture, and sustainability. In this course, students are introduced to the history of hydroponics and the creator of the Kratky Method as well as numerous other creators who have perfected methodologies in hydroponics, aquaponics, and aeroponics. Yearlong, hands-on projects include designing an individualized hydroponic or aquaponics system that successfully (or unsuccessfully) demonstrates the phases of germination, growth, and harvest of selected vegetables, fruits, flowers, or trees. Opportunities to design and build a Personal Food Computer via the MIT Media Lab are encouraged. While the course relies on data collection and measurement of natural and chemical resources, students ultimately define mastery of this subject by the quality of harvest yields vs. the quantity of resources preserved.

**PREREQUISITE:** Foundations of Physical and Biological Science I and II

COURSE DURATION: 1 Trimester

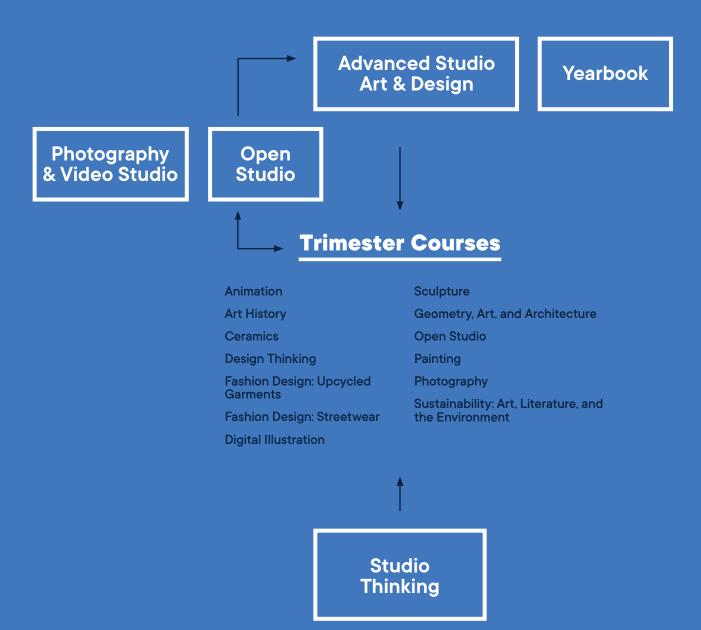
COURSE CREDIT: 1/3 Biological Science Credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

# Visual Arts

# **Visual Arts Curriculum Progression**

## 2/3 credit required



## **EXPECTED VISUAL ARTS TRIMESTER GRID**

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
Fashion Design: Upcycling Garments	Fashion Design: Streetwear	Open Studio
Ceramics	Ceramics	Ceramics
Studio Thinking	Studio Thinking	Studio Thinking
Art History	Animation	Photography
Photography	Painting	Geometry, Art, and Architecture
Sustainability: Art, Literature, and the Environment	Photography	Painting
Design Thinking	Digital Illustration	Design Thinking
Painting		Sculpture
		Photography and Video Studio

## ANIMATION

This course is designed to teach students the basics of animation. Students learn how to create characters, storyboard, present, and create an animated story. Students are introduced to the principles of animation and basic techniques including staging, timing, mechanics, and kinetics. Students move from basic flip book and stop motion animation to digital animation using Adobe Animate. Using this program, students work with digital timelines, key frames, and outputting content for the web. Students work independently and in teams to script, plot, and bring to life an animated story or scene.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit

## CERAMICS

Students study the historical context of ceramics in the past and present while developing their own voice with this tactile material. This course covers the basics of thrown pottery and hand-building techniques in pinch, slab, and coil while creating exquisite vessels and sculptures. An understanding of the transformative process of clay is discovered by learning about glaze composition and the firing process in an electric kiln. This course can be taken for two trimesters for a deeper dive in the medium.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit

## **DESIGN THINKING**

This course is an introduction to the historical and contemporary world of design. Students explore the design thinking process as a means of addressing a series of visual challenges. Visual communication skills using color, balance, emphasis, pattern, contrast, scale and movement are developed, while also learning the basics in professional design programs such as Photoshop and Illustrator.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit

#### FASHION DESIGN: STREETWEAR ART HISTORY

Students learn about the history of streetwear and fashion brands while examining their influence on culture and society in the past and present. An introduction to the design process is taught in preparation for students to take on the ultimate design challenge: creating a oneof-a-kind shoe inspired by a theme of their choice. Use of both handmade methods and digital applications will be explored through collaborative projects.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit

## **FASHION DESIGN: UPCYCLING**

Inspired by our need to reduce, reuse, and recycle, this course focuses on the environmental impacts of the fashion industry. Fashion illustrations and mood boards are used to ideate designs. Experimentation with altering fabrics using dye, ink and paint are explored. Basic sewing both by hand and machine is introduced. A showcase of completed garments from the course are revealed at the conclusion of the course.

PREREQUISITE: None

COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 Visual Arts Credit

## GEOMETRY, ART, AND ARCHITECTURE

This course covers topics of mathematical structure in art and architecture. Related topics include the construction of polyhedrals, the study of Platonic solids, the golden ratio, perspective, symmetry, and pattern in art. Geometry in architectural structures such as the Parthenon, modern architecture, and engineering are studied. Students apply the design process and digital programs such as SketchUp or CAD to create 3D models. The culmination of this course includes visits to architectural sites and an architectural model inspired by a past, present, or future architectural style of their choice.

PREREQUISITE: Geometry COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 Visual Arts Credit Students spend the trimester exploring seminal artworks from distinct historical periods. They investigate techniques used in each works' creation as well as historical, cultural and, socio-economic factors that may have influenced the style and meaning associated with these artworks. The course focuses on three diverse, non-contingent periods of history with an emphasis on interpretation and discussion of the role of art in each society or time period examined.

PREREQUISITE: Studio Thinking

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit

## PHOTOGRAPHY AND VIDEO STUDIO

This course explores visual storytelling through the medium of digital photography and video. Students concentrate on technical skills such as composition and lighting while also growing their understanding of the conceptual side of video and photographic art. Students explore digital editing of both still and moving images and learn how to use software related to editing. In addition to daily assignments, students complete one series of photographs and one short film. Students are be expected to maintain and post their work to a simple website we create in class.

PREREQUISITE: Photography

COURSE DURATION: 1 trimester

COURSE CREDIT: 1/3 Visual Arts Credit

## SUSTAINABILITY: ART, LITERATURE & THE ENVIRONMENT

In this interdisciplinary course, students learn about positive environmental practices while reflecting on their own impact on the earth. Students learn about artists and writers who blur the boundaries between the humanities and science through poetry, essays, twoand three-dimensional drawings, paintings, sculptures, and installations. Each student has the opportunity to choose a topic to research and connect to a larger creative piece to be completed throughout the trimester. The course concludes with a group exhibition and presentation to the public showcasing their work.

PREREQUISITE: None; open to juniors and seniors only

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit

## SCULPTURE

Students learn to visualize and create three-dimensional art objects, exploring the sculpting processes of carving, modeling, and assemblage. An emphasis is placed on exploring the elements and principles of form, space, texture, balance, and visual movement. Students look at examples of contemporary and historic sculpture in order to contextualize their own work within this tradition. Students learn how to work with a variety of traditional and nontraditional materials such as plaster, wood, paper, and found objects. A focus in this course will be developing public art and site-specific pieces to be created across campus.

PREREQUISITE: none

COURSE DURATION: 1 trimester

COURSE CREDIT: 1/3 Visual Arts Credit

## **OPEN STUDIO**

This course is designed for students who would like to extend their study independently from any previous art course such as fashion design, ceramics, photography, or painting. This course is highly recommended for students who may be considering Advanced Studio Art & Design. Students begin the course by identifying themes and concepts to explore in their artwork paired with group critiques and discussions. A written proposal and outline for the trimester is submitted along with one-on-one progress check-ins during the scheduled class time. Students create a larger independent project for the duration of the class and showcase it at the end of the trimester.

PREREQUISITE: Two art electives of choice

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit

## **STUDIO THINKING** (Required for freshman)

This introductory foundational art course is designed to provide students with experience in a broad array of studio practices and critical-thinking exercises about artwork from diverse cultural backgrounds and historical periods. Students learn artistic processes involving creative thinking, media exploration, and the reflective process while creating a series of choice-based projects.

PREREQUISITE: None

COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 Visual Arts Credit

#### PAINTING

Students build upon their foundational skills as they focus on the art of painting, its application, and materials. Students are introduced to the transparent media of watercolor painting, opaque acrylic painting, and other paint media. Throughout the course, students experience a variety of techniques and create composition through observation as well as incorporation of the established elements of art. Experimentation and an open and creative approach to personal expression are encouraged. This course can be taken for two trimesters for a deeper dive in the medium.

#### PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit

#### PHOTOGRAPHY

This course explores photography as a visual art medium in the 21st century. Students examine digital photographs as a means of personal expression, documentation, and story-telling. Topics covered include aperture and shutter settings, composition, depth of field, motion control, alternative camera angles, lighting, and genres of photography. Students receive basic instruction, watch demonstrations of techniques, and see samples of the desired outcomes. In addition to taking photos, students also spend time editing and manipulating images in Adobe Photoshop. Students are expected to maintain and post their photography work to a simple website we create in class. This course can be taken for two trimesters for a deeper dive in the medium.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit

## **DIGITAL ILLUSTRATION**

This course focuses on a variety of illustration styles and techniques using Adobe Illustrator and Adobe Photoshop. Traditional drawing skills and color theory are applied through a digital format and integrated with the study of the established principles of design. Students develop means of visual problem solving, personal expression, and communication through design as we examine ways in which the graphic image is interpreted. Graphic design, logo design, and editorial design are explored as students strive to develop their own signature style over the course of the trimester.

PREREQUISITE: None COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 Visual Arts Credit

## ADVANCED STUDIO ART & DESIGN

This is a multimedia studio art and design course intended for students who would like to pursue an advanced art and/or design study. This year-long course is focused on the production of art and/or design projects in a collaborative group. This course may be used as portfolio preparation for admission into a college art or design program for students entering into their junior year. Students create an extensive body of work both in and outside of class while exploring themes, concepts, and contemporary practices in art and design fields. The course concludes with artists and designers showcasing their portfolio in a group exhibition and artist talk in the spring. Students may submit their work in this course for their SIP with instructor approval.

**PREREQUISITE:** Three art electives of choice and department approval.

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Visual Arts Credit

## YEARBOOK: MARKETING, DESIGN & STORY

Students in this course serve as staff for Wellington's annual yearbook publication. Students develop a theme for the yearbook, design and promote the yearbook, and capture key moments during the school year through visual and written storytelling. Working on a school-wide publication requires commitment, responsibility, and good time management skills. Students in this course learn about how typography, colors, and composition are the foundations for good design and design the pages and cover of the yearbook using various digital platforms. This class meets on Wednesdays throughout the year. This class is ideal for students interested in journalism or marketing or who simply want to be a part of telling the story of their school experience.

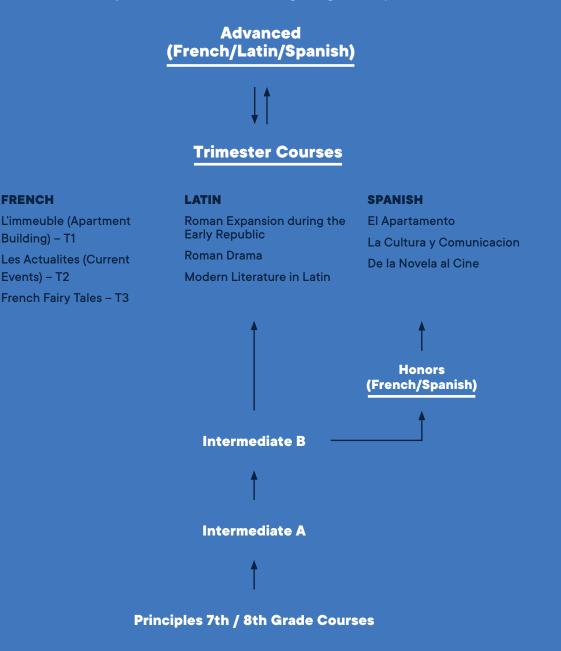
#### PREREQUISITE: None

COURSE DURATION: 1 Trimester, LEAP Days COURSE CREDIT: 1/3 Credit

# World Languages

# **World Languages Curriculum Progression**

## 3 years of same language required



## **EXPECTED WORLD LANGUAGES TRIMESTER GRID**

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
French: L'immeuble (Apartment Building) – T1	French: Les Actualites (Current Events) – T2	French Fairy Tales – T3
Latin: Roman Expansion during the Early Republic	Latin: Roman Drama	Latin: Modern Literature in Latin
Spanish: El Apartamento	Spanish: La Cultura y Comunicacion	Spanish: De la Novela al Cine

## **FRENCH – PRINCIPLES**

The Principles course is organized around three modes of communication – interpersonal, interpretive, and presentational. Students are introduced to basic French grammar by participating in interpersonal conversations, interviews, skits, and role-playing activities. They practice the interpretive mode of communication by hearing native speakers in audio and video recordings, as well as by reading specially adapted texts. Students also prepare short presentations and writings. French and Francophone culture is discussed throughout the course.

**PREREQUISITE:** None

COURSE DURATION: 1 Year

COURSE CREDIT: 1 World Languages Credit

## **FRENCH – INTERMEDIATE A**

As in the Principles course, the goal is to steer students toward proficiency in speaking, understanding, reading, and writing French. Students are given ample opportunity to hear native speakers on video, DVD, and websites. Interpersonal activities such as skits, interviews, conversations, and role-playing help students use the grammar they are acquiring in order to communicate in French. We begin to read and write more extensively. Stories are discussed, summarized, and often reenacted in class. French and Francophone culture is discussed throughout the course.

**PREREQUISITE:** French Principles or department approval

COURSE DURATION: 1 Year

COURSE CREDIT: 1 World Languages Credit

#### **FRENCH – INTERMEDIATE B**

French – Intermediate B continues the work begun in Principles and Intermediate A, expanding communicative activities, and covering the most advanced aspects of French grammar. Extensive listening comprehension activities help train the students to understand the main points of a spoken text. Through the introduction of literature, students learn to read for gist and to discuss relevant topics in class as well as in writing. Cultural awareness is an integral part of the curriculum.

**PREREQUISITE:** French Intermediate A or department approval

COURSE DURATION: 1 Year

COURSE CREDIT: 1 World Languages Credit

## HONORS FRENCH IV / ADVANCED FRENCH V

Honors French IV / Advanced French V involves exposure to authentic texts, written (taken from newspapers and magazines) and spoken (taken from news broadcasts and videos). We discuss current events in Europe and French-speaking countries, along with a wide range of issues, as presented in the media and in literature. Students are encouraged to express their opinions and react to the opinions of others. Emphasis is placed on accurate self-expression, both spoken and written. Therefore, we thoroughly review grammar, as well as routinely practice speaking and writing. This course runs on a two-year cycle; the material is different each year so that students complete two years without repetition. Students in Advanced French V are eligible to take the AP examination in French Language.

**PREREQUISITE:** For Honors French IV: Intermediate B and department approval; For Advanced French V: Honors French IV and department approval

COURSE DURATION: 1 Year

COURSE CREDIT: 1 World Languages Credit

## FRENCH: L'IMMEUBLE (APARTMENT BUILDING) – T1

During the course of the trimester, each student takes on the identity of one tenant of the building, planning a life by deciding his or her personality, preferences, tastes in clothes and décor, profession, activities, and background. Interactions, both spoken and in writing, between tenants are common, as are social occasions, disputes, common problems, and possibly even drama and disasters. The story flows as the tenants wish.

**PREREQUISITE:** French III (Intermediate B) or teacher recommendation

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 World Languages Credit

## FRENCH: LES ACTUALITES (CURRENT EVENTS) - T2

Students investigate current events in France and French-speaking countries and how they relate to US and local news in print, on the Internet, and on TV and radio. Students discuss, analyze, present, and write reactions to issues in the news. While doing so, the class prepares their own news distribution – one podcast, one video, and one newspaper.

**PREREQUISITE:** French III (Intermediate B) or teacher recommendation

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 World Languages Credit

#### **FRENCH FAIRY TALES -T3**

Do you remember the excitement of watching Disney's version of "Beauty and the Beast" or "Cinderella" for the first time? Perhaps you felt scared as you accompanied Little Red Riding Hood through the forest to grandma's cottage? Come discover the magic and mystery of these legends. In this course, students will develop French language skills, learn about French fairy tales, explore larger social themes within the tales and even apply them to write a short fairy tale of their own!

**PREREQUISITE:** French III (Intermediate B) or teacher recommendation

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 World Languages Credit

## **LATIN – PRINCIPLES**

This course is an introduction to the fundamentals of classical Latin, emphasizing grammar, reading comprehension, vocabulary, and English derivatives. Grammar topics include all verb tenses in both the active and passive voices, three declensions of nouns, the uses of six cases, adjective modification, and adverb formation. In addition, opportunities are offered to pursue individual interests in various aspects of culture and history.

PREREQUISITE: None

COURSE DURATION: 1 Year

COURSE CREDIT: 1 World Languages Credit

#### LATIN – INTERMEDIATE A

Latin – Intermediate A is a continuation of basic Latin, completing the study of grammar and syntax as well as general aspects of culture and history. Topics covered include comparison of adjectives and adverbs, indirect discourse, participles, uses of the subjunctive mood, and the ablative absolute. Increased emphasis is placed upon mastering the translation of Latin prose to English.

**PREREQUISITE:** Latin Principles

COURSE DURATION: 1 Year

COURSE CREDIT: 1 World Languages Credit

### LATIN – INTERMEDIATE B

A thorough review of the forms and syntax of classical Latin begins this course, the primary focus of which consists of readings from a variety of authors including Livy, Caesar, and Ovid. The study of military organization, an overview of Roman historians, and an understanding of Caesar as a prose stylist supplement this aspect of the course, while readings from Ovid's "Metamorphoses" provide an introduction to Roman epic poetry.

PREREQUISITE: Latin Intermediate A

COURSE DURATION: 1 Year

COURSE CREDIT: 1 World Languages Credit

## **ADVANCED LATIN**

Advanced Latin extends the study of Latin literature begun in Latin Intermediate B to focus on Vergil's "Aeneid" and Caesar's "Gallic War." In addition to reading comprehension, appreciation of the various themes and structures of the Roman epic poem is stressed. The study of figures of speech, literary techniques, and stylistic forms, as well as the history of the Late Republic and the Augustan Age, supplement the reading selections.

**PREREQUISITE:** Two Trimester Courses and department approval

COURSE DURATION: 1 Year

**COURSE CREDIT:** 1 World Languages Credit

## LATIN: ROMAN EXPANSION DURING THE EARLY REPUBLIC

No simultaneous accounts of written history exist from the Roman Monarchy and early Republican periods. This course uses both written historical accounts from ancient authors such as Livy and Plutarch who wrote long after these events happened, as well as modern scholarly interpretations of primary sources. Students examine how the rise of Rome allowed the society to become a dominant power and the reasons that caused cultural growing pains, which presented as civil strife.

**PREREQUISITE:** Latin Intermediate B or department approval

**COURSE DURATION: 1** Trimester

COURSE CREDIT: 1/3 World Languages Credit

#### LATIN: ROMAN DRAMA

Roman comedy (some of the earliest Roman literature we have) gives us a vastly different picture of Roman life from that which we receive from other classical works. Comedy is full of lovers and mistresses, foolish aristocrats, and crafty servants. Roman drama (most of the extant works were written in the Silver Age as the influence of Rome was waning) can be melodramatic and overly rhetorical, but these very aspects of the texts allow us to understand the Latin language in numerous ways. This course (which may be repeated with teacher recommendation) considers Roman theatre in light of the political, social, and economic realities which made these plays possible.

**PREREQUISITE:** Latin Intermediate B or department approval

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 World Languages Credit

# LATIN: MODERN LITERATURE IN LATIN

In this course, students read a range of authors in Latin after the fall of Rome. This includes both authors who wrote in Latin and those whose works have been translated into Latin. Authors such as Copernicus, Holberg, A. A. Milne, E. B. White, and J. K. Rowling cover many topics from the movement of celestial bodies to witch craft and wizardry. These works include complex grammar and force the reader to fully understand the sentence structure in both English and Latin. For their capstone project, students create their own storybook in Latin.

**PREREQUISITE:** Latin Intermediate B or department approval

**COURSE DURATION: 1 Trimester** 

COURSE CREDIT: 1/3 World Languages Credit

## **SPANISH – PRINCIPLES**

Spanish – Principles enables the student to acquire the four language skills of listening, speaking, reading, and writing. Sound patterns, dialogues, vocabulary, and basic grammar structures are presented. Students learn about the daily life, holidays, and customs of people in Spanish-speaking countries and compare them to their own. The class is conducted largely in Spanish.

#### PREREQUISITE: None

COURSE DURATION: 1 Year

COURSE CREDIT: 1 World Languages Credit

#### **SPANISH - INTERMEDIATE A**

Spanish – Intermediate A reinforces basic skills, expands vocabulary, and further develops grammar concepts. Reading and writing skills are developed and students increase oral communication skills. This class is taught largely in Spanish, with English explanations to clarify grammar points.

**PREREQUISITE:** Spanish Principles

COURSE DURATION: 1 Year

COURSE CREDIT: 1 World Languages Credit

#### **SPANISH – INTERMEDIATE B**

In Spanish – Intermediate B, students continue to develop the skills learned in earlier levels, expanding their ability to comprehend and communicate in Spanish, and learning to integrate advanced grammar structures. Students deepen cultural understanding through exploration of literature, global issues, modern culture, and current events.

PREREQUISITE: Spanish Intermediate A

COURSE DURATION: 1 Year

COURSE CREDIT: 1 World Languages Credit

## **HONORS SPANISH IV**

In Honors Spanish IV, students continue to build communicative and interpretive language skills while exploring global issues, current events, art, and literature. Students strengthen their listening and reading comprehension as they work with a variety of authentic texts and audio selections. They also further develop speaking and writing skills through frequent interpersonal conversations, debates, and presentations. This course is a precursor to Advanced Spanish V.

**PREREQUISITE:** Spanish Intermediate B and department approval

COURSE DURATION: 1 Year

COURSE CREDIT: 1 World Languages Credit

## **ADVANCED SPANISH V**

Advanced Spanish V emphasizes the use of Spanish for active communication and is taught in the style of a college seminar. Students further their proficiency by practicing their speaking ability, listening comprehension, reading comprehension, and writing skills. They review grammar concepts and apply them to study of contemporary global issues. Students in Advanced Spanish V are eligible to take the AP exam.

**PREREQUISITE:** Spanish IV Honors and department approval

COURSE DURATION: 1 Year

**COURSE CREDIT:** 1 World Languages Credit

### **SPANISH: EL APARTAMENTO**

El Apartamento strengthens students' communication proficiency in a simulated real-world context. Students pretend to move to a Spanish-speaking country and take on the identity of tenants in an apartment building. They learn to navigate the city, develop their personalities, preferences, tastes in clothing and décor, professions, activities, and background. Current events are investigated and discussed.Spoken and written interactions between the tenants are common, as are social occasions, disputes, and even the possibility of drama and disasters. The story flows as the tenants wish.

PREREQUISITE: Spanish Intermediate B or department approval

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 World Languages Credit

## SPANISH: LA CULTURA Y COMUNICACION

In this course, students explore popular Hispanic music, celebrities, culture, cultural trends, television, commercials, sports, social media, and current events. This course helps students strengthen their Spanish communication skills through the use of apps, multimedia technology, and everyday conversation.

**PREREQUISITE:** Spanish Intermediate B or department approval

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 World Languages Credit

## SPANISH: DE LA NOVELA AL CINE

Spanish: De La Novela Al Cine focuses on Hispanic literary works and themes and their adaption to film. Students read and discuss literature and films. There are discussions comparing and contrasting the literary selections and films, role-playing, and movie critiques. This course strengthens communication and comprehension proficiency.

**PREREQUISITE:** Spanish Intermediate B or department approval

#### COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 World Languages Credit



Academic for-credit programs and workshops are offered in the 2021 Wellington Summer Program for a fee. Students earn 1/3 credit (the equivalent of one trimester) for each completed academic for-credit program. No credit is awarded for workshops. Programs are subject to cancellation based on enrollment. Register online at www.wellington.org/summer.

## **Academic For-Credit Programs**

#### **CONDITIONING & WEIGHT TRAINING**

#### (grades 9-12)

This course introduces health and physical fitness concepts to students, as we build on each student's individual knowledge and ability. Conditioning & Weight Training blends online learning material and exercising from home, so students can immediately apply course material and gain experience through movement. Additionally, the course provides students with the tools necessary to exercise independently based on their own exercise goals and time availability. Conditioning & Weight Training helps students become intrinsically motivated to stay physically active in their life beyond this three-week course. No specific equipment or space required. This course does not require a minimum level of training experience or athletic ability, as students build their own fitness plans throughout the program. Daily attendance and check-ins are mandatory. Students who complete this course will earn 1/3 Physical Education credit (the equivalent of one trimester).

Instructor: Pete Collopy, Wellington Sports Performance coach

DATES: July 12 – July 30, 9 a.m.–12 p.m.

FEE: \$500

#### GOVERNMENT

#### (grades 10-12)

This three-week course focuses on the United States government and includes an examination of the Constitution, governmental philosophies, federalism, the interplay of the three branches of government, and the civic roles of Americans. The course covers the historical and philosophical foundations of the Constitution, changes to that Constitution that furthered the ideals of the Declaration of Independence, the power and role of the President, and the legislative process. Students study these topics through articles and resources representing a broad range of ideologies and disciplines. In this course, students converse as educated citizens about the structure and principles of our republic and have the tools to involve themselves in the process of governing. US History is a prerequisite for this course. Daily attendance is mandatory. Students who complete this course will earn 1/3 History credit (the equivalent of one trimester).

Instructor: Victoria Pang, Wellington Middle School and Upper School social studies teacher

DATES: July 12 – July 30, 9 a.m.–12 p.m.

FEE: \$550

## PHOTOGRAPHY

#### (grades 10-12)

This course explores photography as a visual art medium in the 21st century. Students examine digital photographs as a means of personal expression, documentation, and story-telling. Topics covered include aperture and shutter settings, composition, depth of field, motion control, alternative camera angles, lighting, and genres of photography. Students receive basic instruction, watch demonstrations of techniques, and see samples of the desired outcomes. In addition to taking photos, students also spend time editing and manipulating images in Adobe Photoshop. Students are expected to maintain and post their photography work to a simple website we create in class. Daily attendance is mandatory. Students who complete this course will earn 1/3 Visual Arts credit (the equivalent of one trimester).

Instructor: Shannon Smith, Wellington Upper School visual arts teacher

**DATES:** July 12 – July 30, 9 a.m.–12 p.m. **FEE:** \$550

#### **PHYSICAL EDUCATION CREDIT**

#### (grades 9-12)

Students participate in a wide variety of rigorous team and lifetime sports as well as physical fitness during this three-week program. Hard work, fair competition, cooperation, sportsmanship, fitness, and enjoyment of physical activity are emphasized. Daily attendance is mandatory. Students who complete this course will earn 1/3 Physical Education credit (the equivalent of one trimester).

Instructor: Paul Demchak, Reynoldsburg physical education teacher

**DATES:** June 14 – July 2, 9 a.m.–12 p.m.

FEE: \$450

## **Workshops**

## ACT TEST PREP BOOT CAMP

#### (grades 9-12)

This boot camp prepares students for the June 13 and July 18 administration of the ACT. Following the testing format they should expect on test day, students take a full-length diagnostic test on the first day using actual ACT test questions. Students receive an individualized score analysis, differentiated instruction based on the results of their practice test, and valuable tips and strategies to help them navigate the most challenging problems from every section. Each day focuses on a different section of the test, with general test-taking tips interspersed throughout the week. Students assemble a helpful "cheat sheet" based on their own proficiency levels and refer to this list of helpful hints often through a series of drills and coaching sessions of varying lengths. As a springboard to the Saturday morning test, students receive 16 hours of intensive instruction supplemented by drills tailored to their specific areas of need. Students of every level of proficiency are encouraged to attend. One of the campers from 2019 used what they learned from the camp to improve their score by six overall points! No academic credit is awarded for taking this program.

Instructor: John Brown, Wellington Upper School teacher

DATES: June 7 – June 11, 9 a.m.–1 p.m. AND

July 12 – July 16, 9 a.m.–1 p.m.

FEE: \$300

## **ART PORTFOLIO DEVELOPMENT WORKSHOP**

#### (grades 10-11)

In this weeklong workshop, students get a jump-start on their art portfolio and gain a firm understanding of what to expect as they begin to move through the college application process. We explore the required components of an art and supplemental portfolio, learn how to properly document artwork for applications, and create a website to organize students' digital portfolios. Each student should bring 5-7 pieces of their best work and any previous sketchbooks. Students' previous work serves as the starting point for examining themes found in their work, reflecting on media they have previously explored, and thinking about media they may want to explore for their portfolio. The instructor provides one-on-one feedback. By the end of the week, each student will leave with a set of goals to complete over the summer, future portfolio piece ideas, a list of art programs broken down by specialties to help plan college visits, and a comprehensive list of opportunities including art scholarships, art competitions, and special events such as National Portfolio Day. No academic credit is awarded for this program.

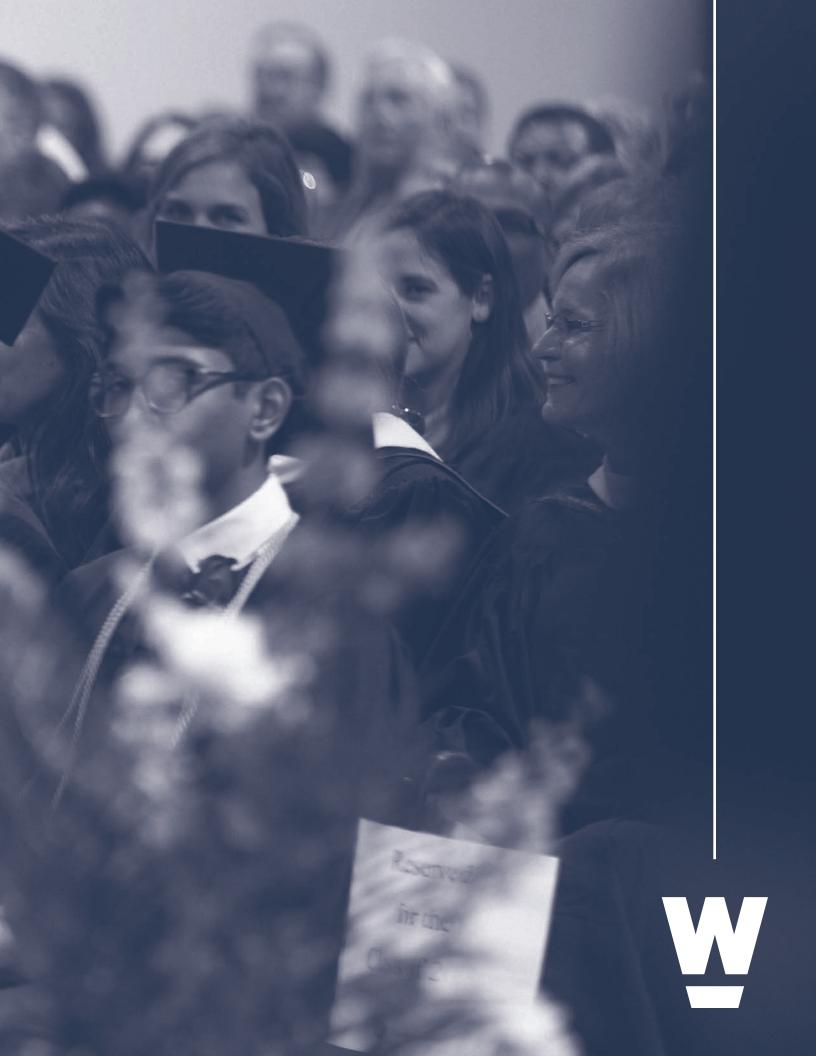
Instructor: Jaime Bennati, Wellington Upper School visual arts teacher

DATES: June 7 – June 11, 9 a.m. –12 p.m.

FEE: \$250

Students don't have to wait until college to be challenged and love it. This isn't just a launching pad for the future—our students are already doing amazing things.

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Wellington is an independent, coeducational, preschool through grade 12, collegepreparatory day school dedicated to preparing citizens who achieve, lead, and find fulfillment in a global community.

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wellington.org