

# Upper School Programs



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### **2019 COLLEGE ACCEPTANCES AND MATRICULATIONS**

This college list for the Wellington Class of 2019 mirrors and celebrates the diversity found in each student's talents and interests.

Allegheny College American University Appalachian State University Arizona State University **Ball State University** Bellarmine University Boston College W **Boston University** Bowdoin College W **Bowling Green State** University w **Brandeis University Butler University** Calvin College Capital University W Case Western Reserve University w Centre College Cleveland Institute of Art W Cleveland State University College of Charleston W College of Wooster Colorado State University Columbus State Community College W Concord University Connecticut College Denison University W **DePaul University** DePauw University W Drexel University W Earlham College W **Eckerd College** Elon University Embry-Riddle Aeronautical University Emerson College Florida Gulf Coast University Fordham University Franklin College

Grinnell College W **Guilford College** Hamilton College W Heidelberg University High Point University Indiana University w Indiana University - Purdue University Indianapolis Ithaca College Johns Hopkins University W Kalamazoo College Kansas State University Kent State University Kenyon College Lewis and Clark College Louisiana State University Loyola University Chicago W Marquette University w Massachusetts Institute of Technology w McGill University Miami University W Michigan State University Middlebury College Northwestern University W Ohio Northern University Ohio State University W Ohio State University at Newark Ohio University w Ohio Wesleyan University Olivet Nazarene University Otterbein University W Pace University Pennsylvania State University Point Park University Providence College Purdue University @

Purdue University - Fort

Wayne Queens University of Charlotte Reed College Rensselaer Polytechnic Ringling College of Art and Design Rochester Institute of Technology @ Rose-Hulman Institute of Technology Saint Joseph's University Santa Clara University Savannah College of Art and Design Southern Methodist University w Suffolk University Temple University The American Musical and Dramatic Academy Tulane University w University of Akron University of Alabama University of Arizona University of British Columbia University of California -Santa Cruz University of Cincinnati University of Colorado -Boulder University of Dayton w University of Delaware University of Denver University of Illinois at Urbana-Champaign University of Kentucky W University of Massachusetts -Amherst

University of Miami University of Michigan W University of Nevada University of North Carolina -Charlotte University of Oregon University of Pittsburgh w University of Portland University of Puget Sound W University of Rochester University of South Carolina University of Tennessee W University of Toledo W University of Virginia University of Wisconsin -Madison w **Utah State University** Vanderbilt University w Villanova University Virginia Commonwealth University Virginia Polytechnic University w Wake Forest University Washington University in St. Wesleyan University West Virginia University Wheeling Jesuit University Wittenberg University Worcester Polytechnic Institute Wright State University Xavier University W Youngstown State University

### **2004-2019 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

Carnegie Mellon University

Case Western Reserve

University

Central Saint Martins

Centre College

Champlain College

Chapman University
Clemson University

Olembor of liversity

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

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 -

Denve

Kasturba Medical College - India

Kent State University

Kenyon College

Korea Advanced Institute of

Science and Technology

Lake Forest College

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

ivialorie or liversity

Manhattanville College

Marietta College

Marquette 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 Michigan University

Northwestern University

Notre Dame College

Oberlin College
Occidental College

Ohio Northern University

Ohio State University

Ohio State University -

College of Business

Ohio University

Ohio Wesleyan University

Onio wesieyan Onive

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

Queen's University of Cananda

Reed College

Regis University

Rensselaer Polytechnic Institute

Rhodes College

Rice University

Rivier College

### 2004-2019 MATRICULATIONS (continued)

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 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 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 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 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
Wellesley College

Wesleyan University

West Virginia University

Westmont College

Wheaton College

Wheaton College - Massachusetts

Williams College
Wilmington College
Wingate University
Wittenberg University

Wright State University

Xavier University
Yale University

Wofford College

### **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

English 9 Public speaking and research course. Integrated with World History			<b>World Language</b> Latin, French, or Spanish
<b>World History</b> Public speaking course. Integrated with English 9			<b>Mathematics</b> Depending on placement
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).		y (physics) led to	<b>Free Period</b> (at least one required)
Writing 9 Creativity and design course	Studio Thinking	Physical Education	Performing Arts   Computer Science   Entrepreneurship Other electives

### Sample Courseload - 10th grade

Research course. Th	<b>English 10</b> nree Trimesters: Book Clu	b, 1920s, Drama	<b>World Language</b> Latin, French, or Spanish
US History			<b>Mathematics</b> Depending on placement
Foundations of Physical and Biological Science I Biology Chemistry Physics			<b>Free Period</b> (at least one required)
Writing 10 Dedicated writing curriculum	Lifetime Health	Global Engagement Trimester	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	Introduction to Psychology	DNA Technologies	Podcast Journalism Research and public speaking course	<b>Cryptography</b> Creativity and design course	Geometry, Art and Architecture Interdisciplinary visual arts and mathematics
Advanced Economics Research, interdisciplinary history, and mathematics course		Independent Science Research (ISR) Research course			
	Honors Precalculus			Advanced Chemist	ry
Band		Fashion Design: Haute Couture	Electricity and Magnetism	Biography of Cancer	
Honors Spanish IV		Spanish: El Arts y La Cultura Global Course	Nutrition	Spanish: La Gastronomie Hispania Global Course	
Sports Performance Traninig	<b>Neuroscience</b> Public speaking course	Government	Differential Calculus	Integral Calculus	Calculus-Based Statistics
Stories of the Holocaust Global course	Stories on Trial Public speaking, 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. Any student who is not pre-approved to take an advanced/honors course may request special permission with the understanding that, in the professional opinion of the faculty, enrollment in that course may provide an extraordinary challenge to the student.

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 assistant head of upper school. 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.

### **COURSE ICONS**

Courses are listed by academic department, many with prerequisites or grade-level requirements. Additionally, some courses are demarcated with icons to demonstrate different pedagogical threads woven throughout academic departments and grade levels. Students might find these useful as another way to seek out courses they will find engaging.



### **Creativity & Design**

Creativity & design courses are developmental in nature—there is a focus on the iterative process. These courses allow for deviation from predetermined content to promote curiosity, inquiry, and open experimentation. Idea generation and exploration of media are the core of creativity & design courses.



### **Public Speaking**

Public-speaking courses provide students ample opportunity to develop oral presentation skills. These courses are structured so that students and teachers offer feedback to one another on aspects of public-speaking, such as: thesis, organizational pattern, vocal variety, and body language.



### Global

In global courses, students investigate the world through a process of analyzing and framing questions about global issues. In doing so, students develop their ability to recognize, understand, and compare other perspectives. These courses are a significant component of the Global Citizenship Certification.



### Research

Students demonstrate the development of research skills by creation of a research proposal, collection and organization of data, analysis/interpretation of data, conclusion(s), and a final presentation and/or product. Research courses may be based on hypotheses, discovery, or solutions (service, entrepreneurial, or engineering).

### **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.

	A	В
<b>8-8:30</b> Attendance at 8:30	Flex/Clubs	Flex/Clubs
8:30-8:45	Morning Meeting	Morning Meeting
8:50-10:10	Period 1	Period 5
10:15-11:35	Period 2	Period 6
11:35–11:50	Break	Break
11:50-1:10	Period 3	Period 7
1:10-2:10* Advisory will meet each Wednesday	Lunch/Break	Lunch/Break
2:10-3:30	Period 4	Period 8

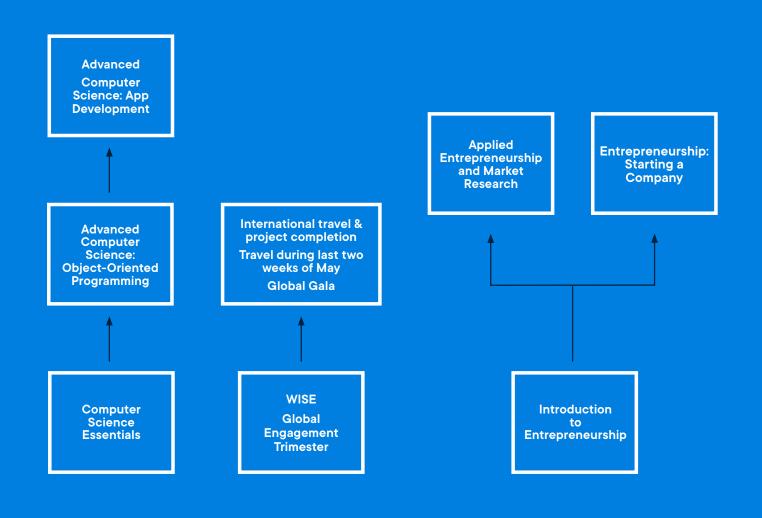
# **CLASS OF 2022 GRADUATION REQUIREMENTS**

Note: This list is **NOT** applicable to other grade levels.

(1 2/3 Credits: 2/3 Visual, 1 Performing)	COURSE NAMES
1st year 1/3 Credit Visual Art	Studio Thinking
1/3 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	
4th year or three trimesters (3 Credits)	COURSE NAMES
	COURSE NAMES World History
(3 Credits)	
(3 Credits) 1st year (1 Credit)	World History
(3 Credits) 1st year (1 Credit) 2nd year (1 Credit)	World History US History
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit	World History US History History
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit  1/3 Credit	World History US History History History
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit  1/3 Credit  1/3 Credit	World History US History History Government
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit  1/3 Credit  1/3 Credit  (3 2/3 Credits including Health)  1st year	World History US History History History Government COURSE NAMES Foundations of Physical and Biological
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit  1/3 Credit  1/3 Credit  (3 2/3 Credits including Health)  1st year  1 Credit LAB science (1/2 Biological & 1/2 Physical)  2nd year	World History US History History History Government COURSE NAMES Foundations of Physical and Biological Sciences 1 Foundations of Physical and Biological
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit  1/3 Credit  1/3 Credit  (3 2/3 Credits including Health)  1st year  1 Credit LAB science (1/2 Biological & 1/2 Physical)  2nd year  1 Credit LAB science (1/2 Biological & 1/2 Physical)	World History US History History History Government COURSE NAMES Foundations of Physical and Biological Sciences 1 Foundations of Physical and Biological
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit  1/3 Credit  1/3 Credit  (3 2/3 Credits including Health)  1st year  1 Credit LAB science (1/2 Biological & 1/2 Physical)  2nd year  1 Credit LAB science (1/2 Biological & 1/2 Physical)  3rd year or three trimesters of any LAB Science	World History US History History History Government COURSE NAMES Foundations of Physical and Biological Sciences 1 Foundations of Physical and Biological
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit  1/3 Credit  1/3 Credit  (3 2/3 Credits including Health)  1st year 1 Credit LAB science (1/2 Biological & 1/2 Physical)  2nd year 1 Credit LAB science (1/2 Biological & 1/2 Physical)  3rd year or three trimesters of any LAB Science  2nd year Lifetime Health (1/3 Credit)	World History US History History History Government COURSE NAMES Foundations of Physical and Biological Sciences 1 Foundations of Physical and Biological
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit  1/3 Credit  1/3 Credit  (3 2/3 Credits including Health)  1st year 1 Credit LAB science (1/2 Biological & 1/2 Physical)  2nd year 1 Credit LAB science (1/2 Biological & 1/2 Physical)  3rd year or three trimesters of any LAB Science  2nd year Lifetime Health (1/3 Credit)  1/3 Credit any other health	World History  US History  History  History  Government  COURSE NAMES  Foundations of Physical and Biological Sciences 1  Foundations of Physical and Biological Sciences 2
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit  1/3 Credit  1/3 Credit  (3 2/3 Credits including Health)  1st year  1 Credit LAB science (1/2 Biological & 1/2 Physical)  2nd year  1 Credit LAB science (1/2 Biological & 1/2 Physical)  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)	World History US History History History Government COURSE NAMES Foundations of Physical and Biological Sciences 1 Foundations of Physical and Biological Sciences 2  COURSE NAMES
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit  1/3 Credit  1/3 Credit  (3 2/3 Credits including Health)  1st year  1 Credit LAB science (1/2 Biological & 1/2 Physical)  2nd year  1 Credit LAB science (1/2 Biological & 1/2 Physical)  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)  1st year PE (1/3 Credit)	World History US History History History Government COURSE NAMES Foundations of Physical and Biological Sciences 1 Foundations of Physical and Biological Sciences 2  COURSE NAMES
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit  1/3 Credit  1/3 Credit  1/3 Credit  (3 2/3 Credits including Health)  1st year  1 Credit LAB science (1/2 Biological & 1/2 Physical)  2nd year  1 Credit LAB science (1/2 Biological & 1/2 Physical)  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)  1st year PE (1/3 Credit)  1/3 Credit	World History US History History History Government COURSE NAMES Foundations of Physical and Biological Sciences 1 Foundations of Physical and Biological Sciences 2  COURSE NAMES
(3 Credits)  1st year (1 Credit)  2nd year (1 Credit)  1/3 Credit  1/3 Credit  1/3 Credit  (3 2/3 Credits including Health)  1st year  1 Credit LAB science (1/2 Biological & 1/2 Physical)  2nd year  1 Credit LAB science (1/2 Biological & 1/2 Physical)  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)  1st year PE (1/3 Credit)  1/3 Credit	World History US History History History Government COURSE NAMES Foundations of Physical and Biological Sciences 1 Foundations of Physical and Biological Sciences 2  COURSE NAMES



# **Non-Departmental Curriculum Progression**



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

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
Computer Science Essentials	Advanced Computer Science: Object-Oriented Programming	Advanced Computer Science: App Development
Introduction to Entrepreneurship	Digital Game Creation	Entrepreneurship: Starting a Company
Applied Positive Psychology	Applied Entrepreneurship and Market Research	Music in Film
Publication Design	Photojournalism and Stories	Emerging Independence
	Global Engagement Trimester	Brand Marketing

# 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
- The history and effects of the slave trade in Ghana
- The power of storytelling with the Tandana Foundation in Ecuador
- · International Business in the United Kingdom
- · 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

# ADVANCED COMPUTER SCIENCE: APP DEVELOPMENT

Advanced Computer Science: App Development helps students develop a mobile app. Students use design principles and object-oriented programming to develop and code the app. When completed, the app may be uploaded to the Android or iOS app store.

PREREQUISITE: Object-Oriented Programming or previous year-long Computer Science course

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® 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 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: Introduction to Entrepreneurship or Leadership in Business; open to 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® 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 on their business. Students work through the design process and create a prototype as part of their final presentation.

PREREQUISITE: Introduction to Entrepreneurship or Leadership in Business; open to juniors and seniors

COURSE DURATION: 1 Trimester COURSE CREDIT: 1/3 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, Sqt. Pepper's Lonely Heart Club Band, Across the Universe, and Fantasia). Guest speakers (live or via Skype) provide additional expertise for the class.

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

### THE SCIENCE OF HAPPINESS

The Science of Happiness asks students to investigate how human behavior impacts happiness. Students are asked to review scientific literature and construct experiments to measure variables impacting individuals' capacity to flourish.

This course is offered during even numbered school years (2018–19, 2020–21, etc.).

PREREQUISITE: None

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

### **PUBLICATION DESIGN**

Students in this course play the role of a designer, developing a theme for Wellington's annual yearbook publication. Designers serve as yearbook staff, attending occasional lunch meetings to discuss work with the editors. Working on a schoolwide publication requires commitment, responsibility, and good time management skills. Students in this course learn how typography, colors, and composition are the foundations for good design. Using digital platforms, staff members create layouts and contribute to the final design for the cover. Individual projects expand beyond the yearbook, allowing students to apply publication design to their own interests.

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

### **BRAND MARKETING**

Students in this course work on a marketing team to create and promote Wellington's annual yearbook publication. Marketers serve as yearbook staff, attending occasional lunch meetings to discuss work with the editors. Working on a schoolwide publication requires commitment, responsibility, and good time management skills. Students design ads for local businesses in the community and apply the same process and principles in their own designs that explore self-branding.

PREREQUISITE: None

COURSE DURATION: 1 Trimesterr COURSE CREDIT: 1/3 Credit

# PHOTOJOURNALISM AND STORIES

Students in this course play the role of a journalist for Wellington's annual yearbook publication. Journalists serve as yearbook staff, attending occasional lunch meetings to discuss work with the editors. Working on a schoolwide publication requires commitment, responsibility, and good time management skills. Students capture key events and moments held during the school year through visual and written storytelling.

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



(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 COURSE CREDIT: 1/3 Credit



# **English Curriculum Progression**

### **Trimester Courses**

Advertising the Environment

The Afterlife

**College Composition** 

**Time Travel Literature** 

The Craft of Fiction

The Craft of Poetry

**Greek Tragedy** 

**Great Books: The Art of Fielding** 

**Great Books: Hamlet** 

I Need a Hero

Literature and the Environment

Literature and Film

Literature of New Orleans

Literature and Philosophy

Music and Literature

Notable Authors: Stephen King

Podcast Journalism

Radio Drama

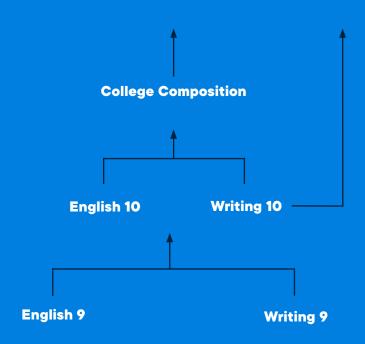
Speech

Stories of the Holocaust

Stories on Trial

Utopia/Dystopia: What a World

We Make



### **EXPECTED ENGLISH TRIMESTER GRID**

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



# 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



# 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: THE ART OF FIELDING

"If it seems a stretch for a baseball novel to hold truth and beauty and the entire human condition in its mitt, well, [this] isn't really a baseball novel at all, or not only. It's also a campus novel and a bromance...a comedy of manners and a tragicomedy of errors... Welcome to the big leagues, kid." -Gregory Cowles, The New York Times Book Review. This class spends the spring trimester (baseball season) with Chad Harbach's triumphant rookie novel. Discussions center on ambition, higher education, friendship, and desire. Baseball purists and non-sports fans alike have collectively designated "The Art of Fielding" a soon-to-be classic American novel.

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 not only on 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. This course is offered during odd numbered years (2019–20, 2021–22, etc.).

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

### I NEED A HERO

What is a hero? How are heroes made? How has the idea of a hero changed over time? Students read tales of heroes through myth, folktales, and contemporary literature in an attempt to answer these questions and explore the elements of the Hero Cycle. Students also identify their own heroic qualities, as well as their own personal hero.

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

# LITERATURE AND THE ENVIRONMENT

In this immersive class, we read a wideranging selection of essays, poetry, and fiction from a robust tradition of American nature writing. Drawing upon nature writers and environmental philosophers, we investigate and analyze how American writers have historically understood and written about the human place in nature, and we consider how those trends continue to influence our feelings toward the environment. Additionally, the class emphasizes a hands-on approach to understanding nature with occasional field trips and a gardening project.

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 are asked to 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 OF NEW ORLEANS

Students study the poetry, fiction, nonfiction, 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.

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

PREREQUISITE: English 10

### 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

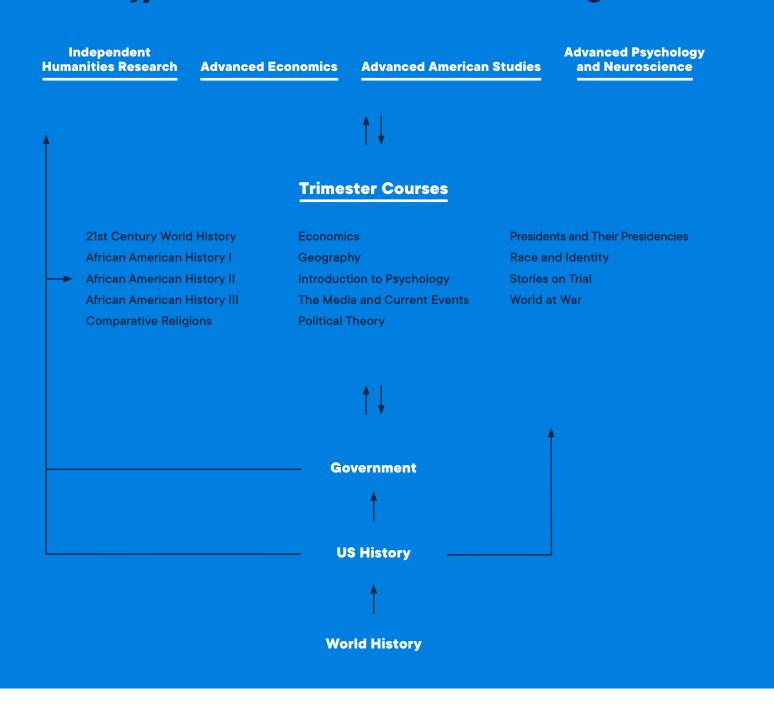
# UTOPIA/DYSTOPIA: WHAT A WORLD WE MAKE

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



# **History/Social Studies Curriculum Progression**



### **EXPECTED HISTORY TRIMESTER GRID**

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
Government	Government	Government
World at War	Economics	Comparative Religions
Introduction to Psychology	Political Theory	Presidents and Their Presidencies
African American History III	African American History I	Stories on Trial
21st Century World History	Race and Identity	African American History II
Ghost Stories	Geography	The Media and Current Events
Notable Authors: Edgar Allan Poe		
Spirituality in Literature		



### **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)



### **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 II**

This course tracks the progression of African American freedom from the onset of the Civil War to the March on Washington Movement before World War II. Our course of study begins with the death of slavery and the meaning of freedom, navigates the collapse of Reconstruction and the onset of the nadir of race relations in America, and concludes with the opening notes of the

modern civil rights movement. We utilize both fictional and non-fictional visual media to evaluate transformative phenomena such as African American political involvement, urbanization, education, and economic advancement/stagnation.

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

# AFRICAN AMERICAN HISTORY III

This course will explore themes related to African American history from the birth of the modern civil rights movement to the 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 changed 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 #blacklivesmatter to their precursors.

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



### **THE COLD WAR**

The Cold War course looks at the political and military tension after World War II between the Soviet Union and the United States, which dominated international relations during the time. Topics include the influence of superpowers on regional conflicts, nuclear proliferation, domestic politics, the development of détente, and the fall of the Soviet Union. This course is offered during even numbered years (2020–21, 2022–23, etc).

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



### **COMPARATIVE RELIGIONS**

Comparative Religions is designed to build an understanding of world religions and religious diversity. Through discussions, readings, research, and presentation of issues, students learn about world religions both in terms of historical context and with respect to a contemporary perspective.

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

### **ECONOMICS**

Economics emphasizes the way in which individuals, households, businesses, and governments participate in the operation of the economy. We explore such concepts as scarcity, supply and demand, and competition, and focus on how economic decisions are made in the marketplace. This course provides students with an introduction to micro and macroeconomics, which includes a solid understanding of the American economic system.

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

### **GHOST STORIES**

The promise, the mystery, and the terror of the supernatural - why else do we love a good ghost story? Students will examine the elements of gothic literature through poetry and short fiction, also determining what these works reveal about Victorian society. For the final project, students will independently select and analyze a modern example (or examples) of this classic genre.

PREREQUISITE: English 10

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 History 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

# 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

# NOTABLE AUTHORS: EDGAR ALLAN POE

Who was the man behind the macabre? Edgar Allan Poe inspired the detective fiction of Sir Arthur Conan Doyle (the creator of Sherlock Holmes), the science fiction of Jules Verne, and the suspense films of Alfred Hitchcock. In this course, we will study the poems, short stories, and life of Poe, analyzing and imitating elements of his distinct style. Students will piece together their final project from menu of creative and analytical assignments.

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

# THE MEDIA AND CURRENT EVENTS

This course is designed to encourage critical thought and expand knowledge concerning issues and events that are occurring during the time of the course. Through discussions, readings, research, and presentation of issues, students learn to analyze the facts of current events, considering their implications on society.

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



# PRESIDENTS AND THEIR PRESIDENCIES

This course examines the history of the presidency as an institution as well as the power of the office throughout our history. We examine specific presidents and their leadership abilities as well as their impact on America's domestic and foreign policies.

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

### **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, where students will study where others have found inspiration in literature. Students will also apply spiritual practices to 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 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

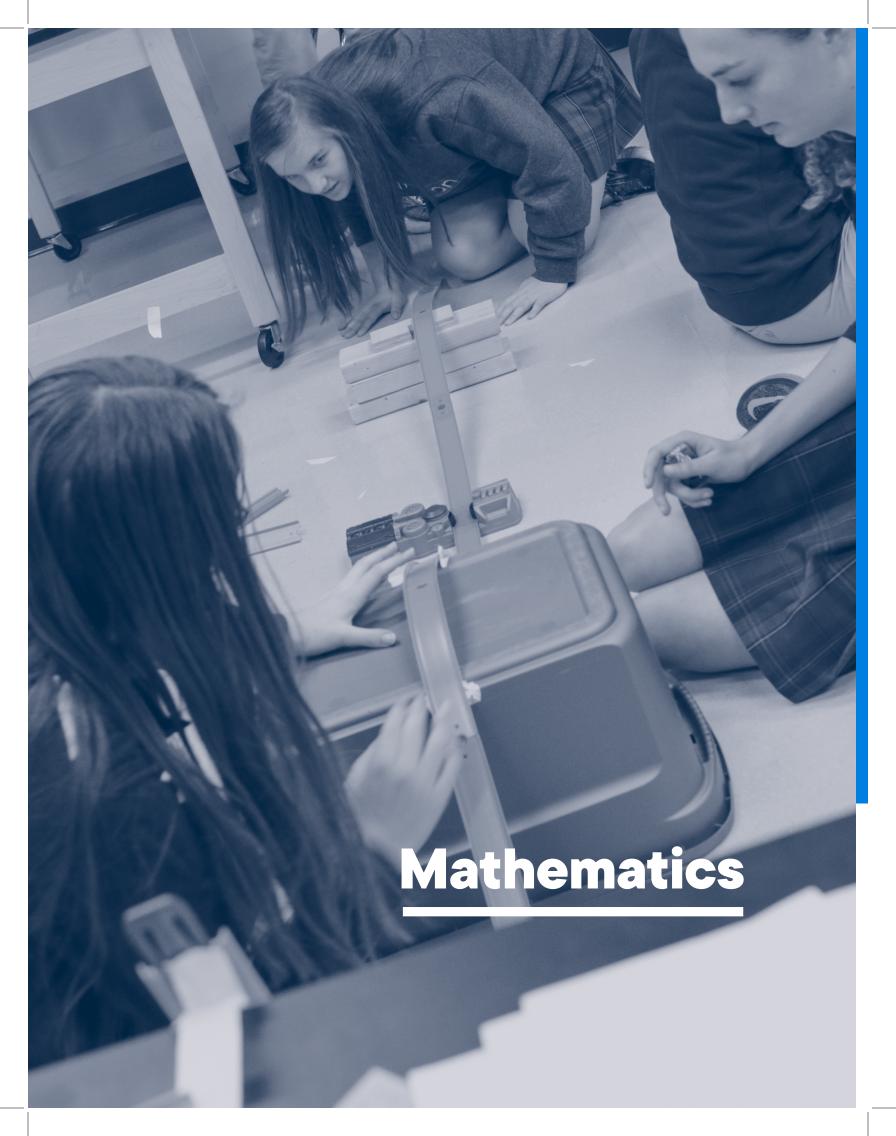
### THE WORLD AT WAR

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. This course is offered during odd numbered years (2019–20, 2021–22, etc).

PREREQUISITE: US History

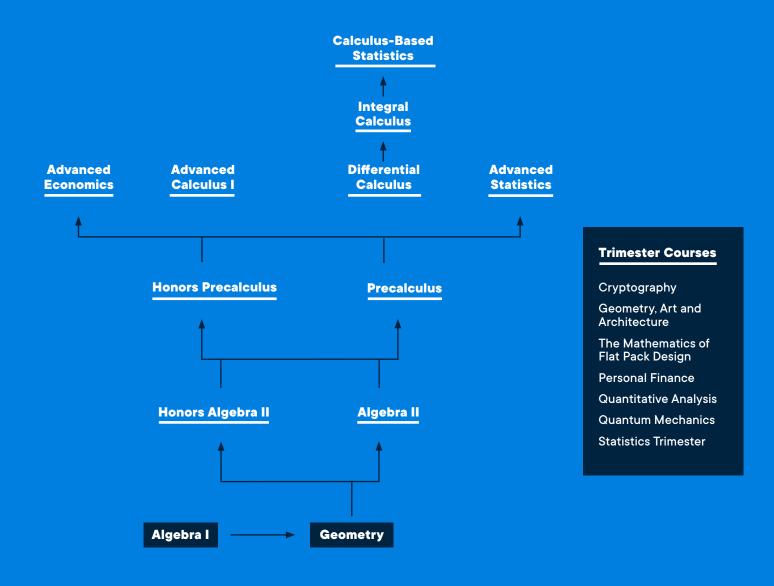
COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 History Credit



# **Mathematics Curriculum Progression**

4 years are required



### **EXPECTED MATHEMATICS TRIMESTER GRID**

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
Differential Calculus Trimester	Integral Calculus Trimester	Calculus-Based Statistics Trimester
Cryptography	Statistics Trimester	Geometry, Art, and Architecture
Personal Finance	Personal Finance	Quantitative Analysis
Statistics Trimester	The Mathematics of Flat Pack Design	Quantum Mechanics

### **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

### **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

# DIFFERENTIAL CALCULUS TRIMESTER

This first trimester of calculus focuses on learning how to differentiate. As the derivative represents the slope of the curve and instantaneous change, students practice finding derivatives of functions. This class is intended for most collegebound seniors who expect to study business or the sciences in college. Applications of the derivative focus on economics, business, and statistics.

PREREQUISITE: B in Precalculus

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Mathematics Credit

# INTEGRAL CALCULUS TRIMESTER

This second trimester of the series focuses on integration. With differentiation behind them, students begin an in-depth study of the integral. This material is comparable to a second semester of calculus. Applications of volume, surface area, and arc length finalize the trimester's studies.

PREREQUISITE: Differential Calculus Trimester

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Mathematics Credit

# CALCULUS-BASED STATISTICS TRIMESTER

This course is designed to use the previous trimesters of differentiation and integration to solve statistics problems. This statistics trimester is fast-paced and covers material in depth. Topics of study include descriptive statistics, probability models and applications, statistical estimation, and hypothesis testing.

PREREQUISITE: Differential and Integral Calculus Trimesters

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Mathematics Credit

### **ADVANCED CALCULUS I**

This full-year course studies the calculus of functions of a single variable. Working at a challenging college-level pace, students learn the development of differential and integral calculus and its broad practical applications. Students have the option of taking the Advanced Placement Calculus AB 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 guizzes, 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.

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)



### **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 grid 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

# THE MATHEMATICS OF FLAT PACK DESIGN

Does the thought of putting together IKEA furniture pique your interest? Have you been dreaming of a class where you can design and build furniture? Flat pack design incorporates form and function in interesting and intriguing ways. In this course, teams of two students use Sketch Up software to design a flat pack chair. After exploring best practices in the industry, students finalize a design to build in the Maker Space. This class requires creativity, strong mathematical skills, and patience. Design awards will be given at the end of the trimester.

PREREQUISITE: Algebra II or Honors Algebra II; Completion or concurrent enrollment in Precalculus or Honors Precalculus

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Mathematics Credit

### **PERSONAL FINANCE**

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

### **QUANTITATIVE ANALYSIS**

Every day, citizens are presented with quantitative data from various sources - the Internet, Twitter, 24-hour news channels, magazines - yet the decision about what and who to believe is seldom discussed. Will Rogers once stated, "All I know is just what I read in the papers, and that's an alibi for my ignorance." This course explores the importance of critical thinking and logic to the task of becoming accurately informed citizens of the community and the world. Using many real life situations, students extend their Algebra II skills in the study of finance, probability, statistics, linear and exponential growth, graph theory, geometry, voting, and social choice.

PREREQUISITE: Algebra II

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Mathematics Credit

### **QUANTUM MECHANICS**

Quantum Mechanics utilizes MATLAB 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.

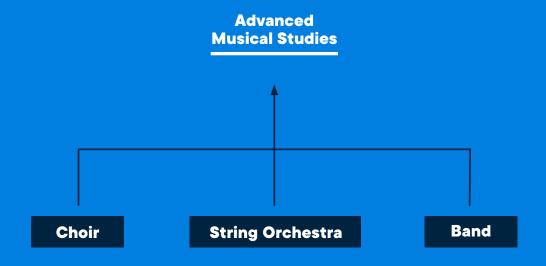
PREREQUISITE: Algebra II
COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Mathematics Credit



# **Performing Arts Curriculum Progression**

1 year is required



### **Drama Trimester Courses**

Acting
5, 6, 7, 8! Musical Theatre History
Theatrical Design
Radio Drama

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

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
Drama – Theatrical Design	Drama – Acting	Drama – 5, 6, 7, 8! Musical Theatre History
		Radio Drama

### **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 - ACTING

Drama – Acting introduces students to the process of acting, provides a solid foundation in a 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 and attention, relaxation and breathing, playing objectives, and overcoming obstacles. As an actor one must be familiar with a breadth of plays; therefore, students explore and expand their knowledge of contemporary plays.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Performing Arts Credit

# DRAMA - 5, 6, 7, 8! MUSICAL THEATRE HISTORY

This course is designed to allow students to evaluate and compare a variety of musicals from the 19th century to present day Broadway musicals including minstrel shows, vaudeville, operetta, musical comedy, opera on Broadway, and rock opera. The course examines all aspects of musicals, including composers, lyricists, directors, choreographers, and performing artists who contributed to the development of the musical form.

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 performance. Theatre is a fundamentally creative art; while coursework involves readings and writings, it also includes creative projects, theatrical compositions, and performance.

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

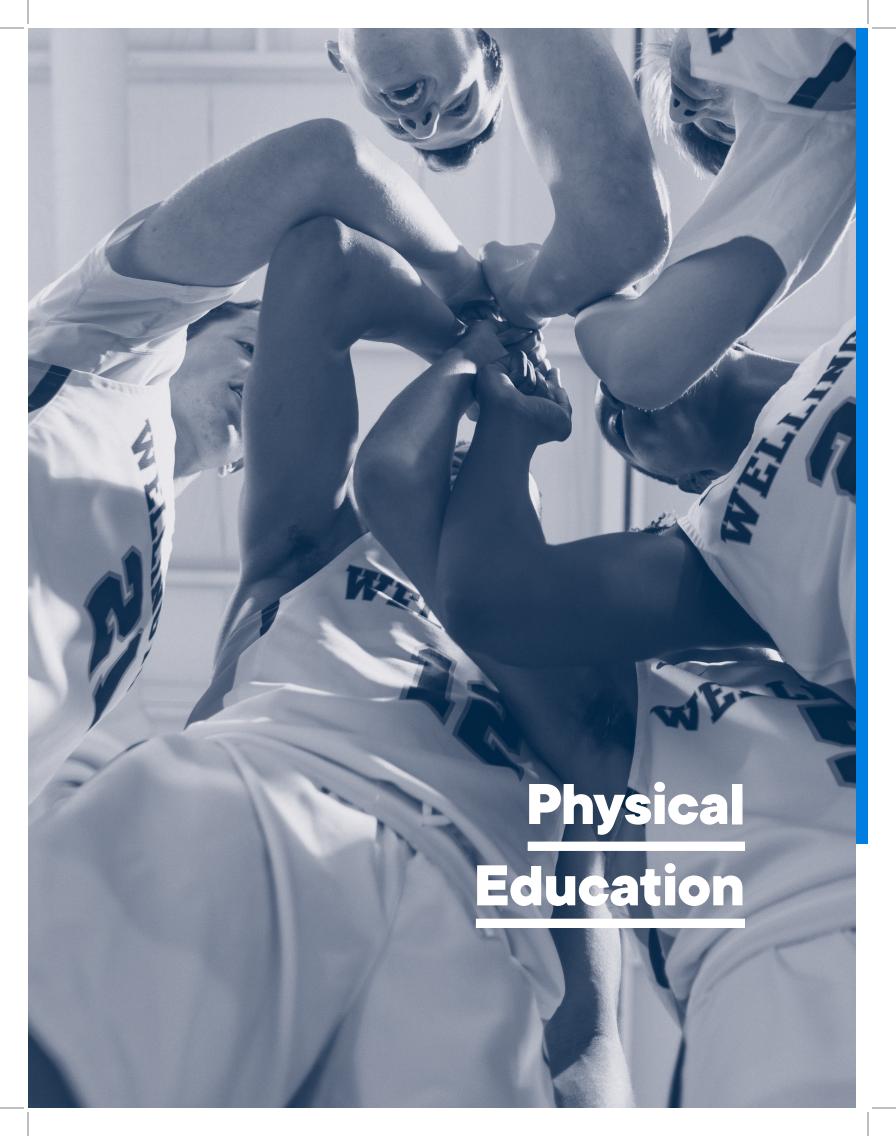
# ADVANCED MUSICAL STUDIES

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 (2018-19, 2020-21, etc.).

PREREQUISITE: Instructor approval

COURSE DURATION: 1 Year

COURSE CREDIT: 1 Performing Arts Credit



# **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

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

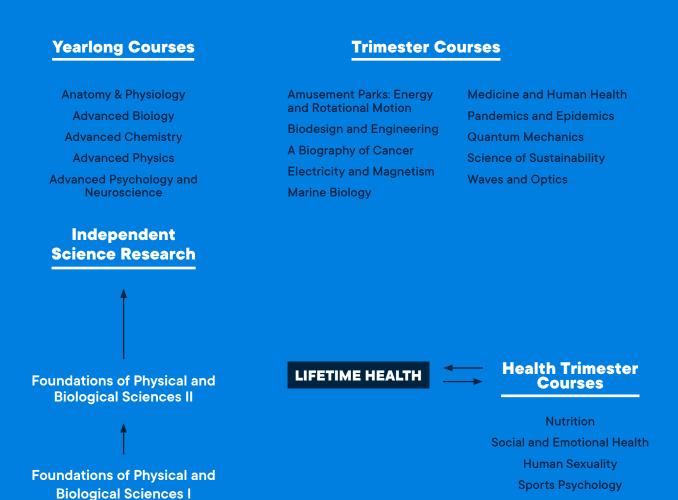
COURSE DURATION: 1 Trimester

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	Nutrition	Social and Emotional Health	
Sports Psychology	A Biography of Cancer	Human Sexuality	
Biodesign and Engineering	Waves and Optics	Marine Biology	
Amusement Parks: Energy and	Science of Sustainability	Electricity and Magnetism	
Rotational Motion			
Astronomy	Social and Emotional Health	Medicine and Human Health	
Pandemics and Epidemics		Quantum Mechanics	

## 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 college-level 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

### **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 iust 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, quizzes/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

### **BIODESIGN AND ENGINEERING**

Engineering is the application of mathematics and science to design, build, and improve solutions to challenging problems. In this course, students compare and contrast the design method to the scientific method through case studies and laboratory experiences. Additionally, the class explores the interconnectedness between nature and engineering as seen in the fields of biomimicry, bioengineering, and systems biology. After learning the fundamentals of design and prototyping, students complete a final project where they research and propose nature-inspired solutions to challenges.

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

### 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-the-art 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

Credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes

### **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

### **MARINE BIOLOGY**

Marine Biology explores oceanography as well as the dynamics of a variety of marine and coastal ecosystems. A primary focus throughout the course is on the diverse array of organisms that live in and around the oceans of the world. Topics such as marine phytoplankton and zooplankton. fisheries, marine mammals, and coral reef ecology are explored. Students gain and demonstrate knowledge through lectures, class discussion based on independent research, laboratory activities, and experiments. A significant portion of the course focuses on the impact of humans on marine ecosystems and includes a service learning project on the conservation and protection of marine ecosystems.

Optional: Open water SCUBA instruction and confined-water (pool) training sessions and a trip to a tropical reef location (Grand Cayman and Belize have been locations in the past) is available for students interested in SCUBA certification and a unique marine science experience.

This course is offered during odd numbered school years (2019–20, 2021–22, etc.).

PREREQUISITE: Foundations of Physical and Biological Sciences I and II

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Physical Science credit

MEETS LABORATORY SCIENCES

**REQUIREMENT: Yes** 



### MEDICINE AND HUMAN

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: 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

## SCIENCE OF 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

### **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** 

#### **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

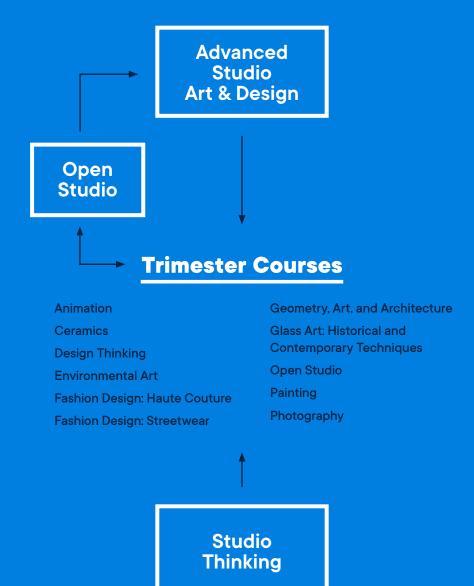
COURSE CREDIT: 1 Laboratory Science Credit

MEETS LABORATORY SCIENCES REQUIREMENT: Yes



### **Visual Arts Curriculum Progression**

2/3 credit required



### **EXPECTED VISUAL ARTS TRIMESTER GRID**

1st Trimester (fall)	2nd Trimester (winter)	3rd Trimester (spring)
Design Thinking	Fashion Design: Streetwear	Open Studio
Environmental Art	Ceramics	Geometry, Art, and Architecture
Fashion Design: Haute Couture	Photography	Ceramics
Photography	Open Studio	Digital Illustration
Painting	Studio Thinking	Animation
Studio Thinking		Studio Thinking

### **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**

In this course, 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. Students gain an understanding of the transformative process of clay by learning about glaze composition and the firing process in an electric kiln.

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 process to visualize compelling ideas using color, balance, emphasis, pattern, contrast, scale, and movement. This course focuses primarily on problem solving design challenges while learning the basics in professional design programs such as Adobe Photoshop, Illustrator, and InDesign.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit

### **DIGITAL ILLUSTRATION**

This course focuses on illustration techniques using Adobe Illustrator and Adobe Photoshop to bring digital projects to life. 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 various means of visual problem solving, expression, and communication and will examine ways in which we interpret the graphic image. 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



### **ENVIRONMENTAL ART**

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

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit

## FASHION DESIGN: HAUTE COUTURE

In this course, students explore and learn about the haute couture fashion industry while designing one-of-a-kind creations. As designers, students learn about essential steps in the design thinking process and how to design for a client. Fashion illustrations, mood boards, and basic construction with a sewing machine are introduced. Collaborative and individual projects include garment construction and surface decoration techniques such as shibori dyeing and hand embroidery. Students in this course also have the opportunity to showcase their completed garments from the trimester in the annual spring fashion show.

PREREQUISITE: None

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit



### FASHION DESIGN: STREETWEAR

Students explore and learn about streetwear fashion by creating their own individual brand. Students also investigate and learn about the history of well-known commercial fashion brands found throughout the world and examine its relationship to art. Individual and collaborative projects are assigned that include screen printed t-shirt designs and a footwear design challenge. Basic construction on a sewing machine is taught with no prior experience necessary. Students in this course also have the opportunity to showcase their completed garments from the trimester in the annual spring fashion show.

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 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 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 the students' choice.

PREREQUISITE: Studio Thinking or Foundations in the Visual Arts; Geometry

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 Visual Arts Credit or 1/3 Mathematics Credit

### **GLASS ART**

Students explore the design process using traditional and digital media to develop a composition for their own stained glass windows. Weekly reflections are integrated in the course to allow students to seek out and find examples of glass art within their own communities and examine their growth with the medium. Students conduct research on glass art as it relates to a variety of cultural contexts found throughout history and the world as they explore a theme of choice for their design. The culmination of this course is the design and creation of a unique stained

glass window. This course is offered during even numbered years (2020–21, 2022–23, etc.).

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. A larger independent project will then be created for the duration of the class and showcased at

PREREQUISITE: Two art electives of choice

COURSE CREDIT: 1/3 Visual Arts Credit

COURSE DURATION: 1 Trimester

#### **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.

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.

PREREQUISITE: None

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.

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



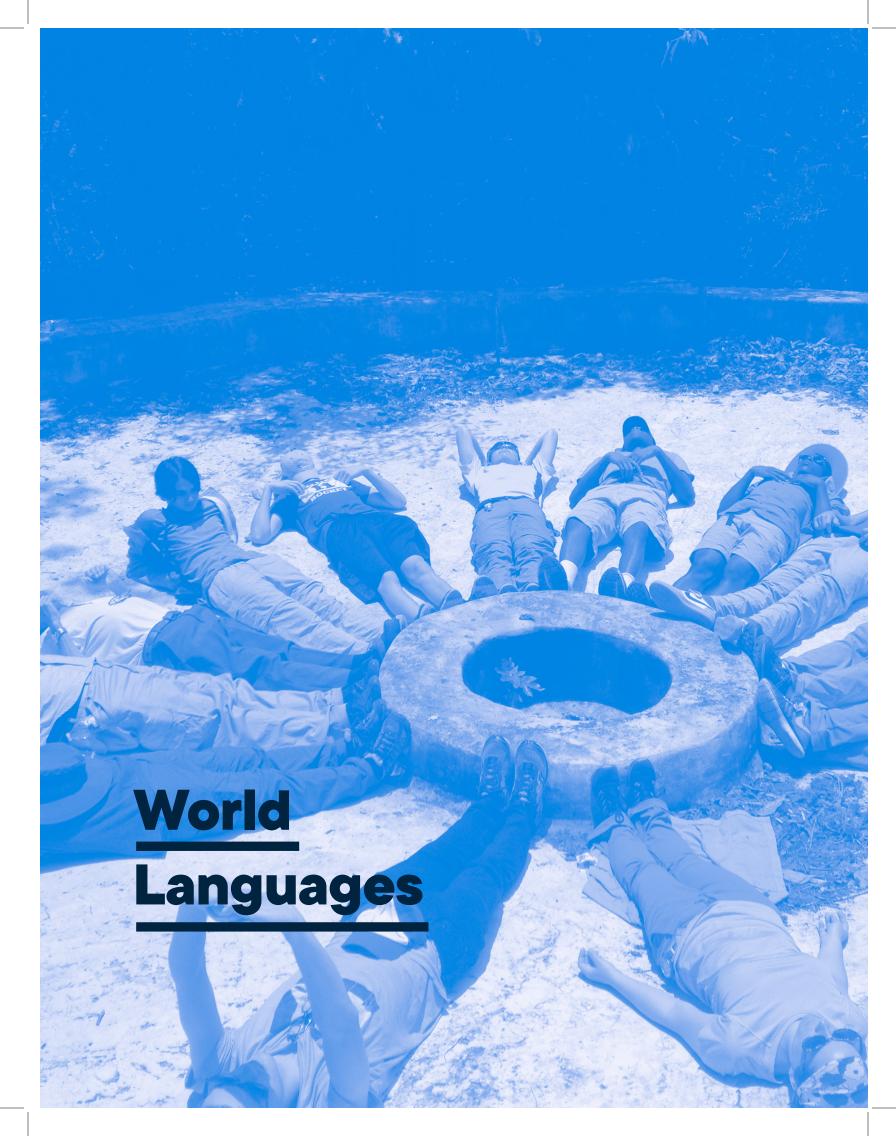
## ADVANCED STUDIO ART & DESIGN

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 theme, concepts, and contemporary practices in art and design fields. Students also may restrict their studies to drawing, 2-D design, or 3-D design to submit an AP Studio Art portfolio. The course concludes with a portfolio showcase in a group exhibition and artist talk during Student Independent Project (SIP) Night.

PREREQUISITE: Two art electives of choice, open studio and department approval (class of 2022 and beyond).

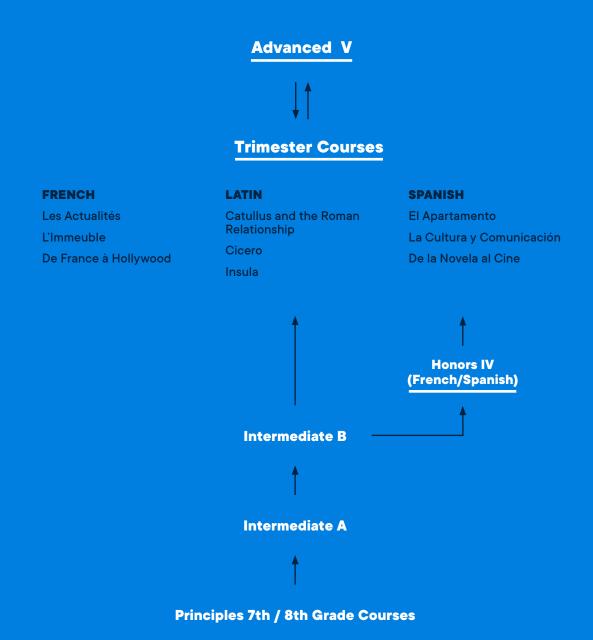
COURSE DURATION: 1 Year

COURSE CREDIT: 1 Visual Arts Credit



## **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	French: Les Actualités	French: De France à Hollywood
Latin: Insula	Latin: Cicero	Latin: Catullus and the Roman
		Relationship
Spanish: El Apartamento	Spanish: La Cultura y Comunicación	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

### FFRENCH: L'IMMEUBLE

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 department approval

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 World Languages Credit

### FRENCH: LES ACTUALITÉS

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 department approval

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 World Languages Credit

## FRENCH: DE FRANCE À HOLLYWOOD

Several French movies later become "Americanized" by Hollywood. What is "French" and what is "American?" What can we learn about the two cultures by the differences between the original French film and its American remake? In this course, we will watch some of these films and discuss these and other questions of culture.

PREREQUISITE: French III (Intermediate B) or department approval

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 World Languages Credit



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

#### **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

### **LATIN: INSULA**

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, 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: Latin Intermediate B or department approval

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 World Languages Credit

### **LATIN: CICERO**

Cicero's influence has waxed and waned over the years, but the number of genres in which he wrote and the sheer volume of the literature he left behind will always make him an important classical writer. In addition to reading his published speeches in this course, students read his poetry, letters, and philosophy. This course (which may be repeated with teacher recommendation) considers Roman politics and history, Cicero's place in and influence on Roman civic life, and the various ways in which Cicero has been viewed by history.

PREREQUISITE: Latin Intermediate B or department approval

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 World Languages Credit

## LATIN: CATULLUS AND THE ROMAN RELATIONSHIP

Gaius Valerius Catullus wrote some of Rome's most recognizable love poetry. His relationship with an infamous woman of the Roman elite gives us a fascinating glimpse into the romantic Roman relationship. In this course, we examine his works, the Roman view on romance, and Catullus' place in Roman literary history.

PREREQUISITE: Latin Intermediate B or department approval

COURSE DURATION: 1 Trimester

COURSE CREDIT: 1/3 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

### **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

#### SPANISH: EL APARTAMENTO

Spanish: 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 COMUNICACIÓN

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 adaptation 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

### **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



Academic for-credit programs and workshops are offered in the 2019 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**

#### PHYSICAL EDUCATION

### (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.

COURSE CREDIT: 1/3 Physical Education Credit

DATES: June 3-21, 9 a.m.-12 p.m.

FEE: \$450

### **GLASS ART**

### (grades 11-12)

Students use traditional and digital media as they design and build their own stained glass windows. Working with glass is a unique medium for students and presents opportunities for problem solving along the way. The culmination of this course is the creation of a unique stained glass window. Journaling is also incorporated throughout the class to allow students an opportunity to reflect on their design process from start to finish. Additionally, students research glass art as it relates to a variety of cultural contexts and current practices found throughout the world.

COURSE CREDIT: 1/3 Visual Arts Credit

DATES: June 10-28, 9 a.m.-12 p.m.

FEE: \$600

### **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. At the conclusion of the course, students are able to converse as educated citizens about the structure and principles of our republic and have the tools to involve themselves in the process of governing.

PREREQUSITE: US History

COURSE CREDIT: 1/3 History Credit

DATES: July 8-26, 9 a.m.-12 p.m.

FEE: \$550

### **Workshops**

#### **ACT TEST PREP BOOT CAMP**

### (grades 9-12)

This crash course boot camp prepares students for the June 8 and July 13 administration of the ACT. Following the 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. No academic credit is awarded for taking this program.

DATES: June 3-7, 9 a.m. - 1 p.m., or July 8-12, 9 a.m. - 1 p.m.

FEE: \$300

### **ART PORTFOLIO DEVELOPMENT WORKSHOP**

### (grades 10-12)

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 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 leaves 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.

DATES: June 10-14, 9 a.m.-12 p.m.

FEE: \$250

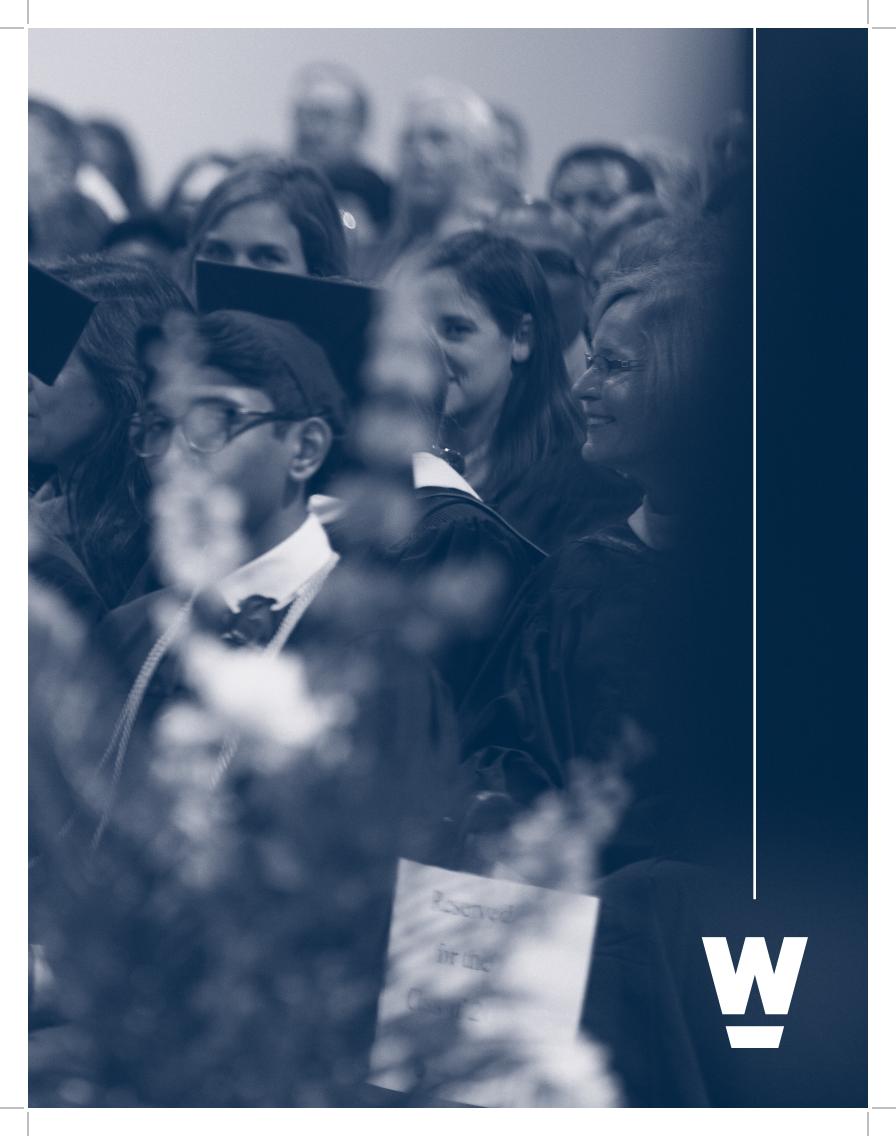
### PERFECTING THE COLLEGE APPLICATION ESSAY

### (grades 9-12)

In this weeklong workshop, students write a series of college application essays with the aim of completing a final essay to send out with their college application. One-on-one feedback is provided by the instructor. Students read a number of models from the Fiske guide "Real College Essays That Work" and consider the language and structure of successful pieces. We cover both the Common Application prompts and supplemental essay questions, and discuss specific essay prompts for non-Common Application schools. No academic credit is awarded for taking this program.

DATES: June 24–28, 9 a.m. – 12 p.m., or July 22–26, 9 a.m. – 12 p.m. FEE: \$200





# Wellington

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

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Wellington.org Updated February 2019