



# COURSE DESCRIPTIONS

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2023-2024

Beginning in 2020-2021, some of our courses will run alternate years. Guidance Counselors can guide the students with the selection process.

This catalog also lists new courses that are planned to run in future years, but may not run in 2023-2024.

## ACADEMY COURSES

Qualified students not enrolled in the Honors Academies may take courses marked as academy courses by recommendation of the teachers and/or approval of the Department Head.

# CONTENTS

The DePaul Catholic graduate will exhibit the academic aptitude for success in higher education and possesses a variety of intellectual skills that go beyond college entrance requirements. The student has an appreciation for learning and is willing to be accountable for one's own academic accomplishments. Our broad-based curriculum is designed to meet the growing demands of a faith-filled citizen in global society.

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# GRADUATION REQUIREMENTS

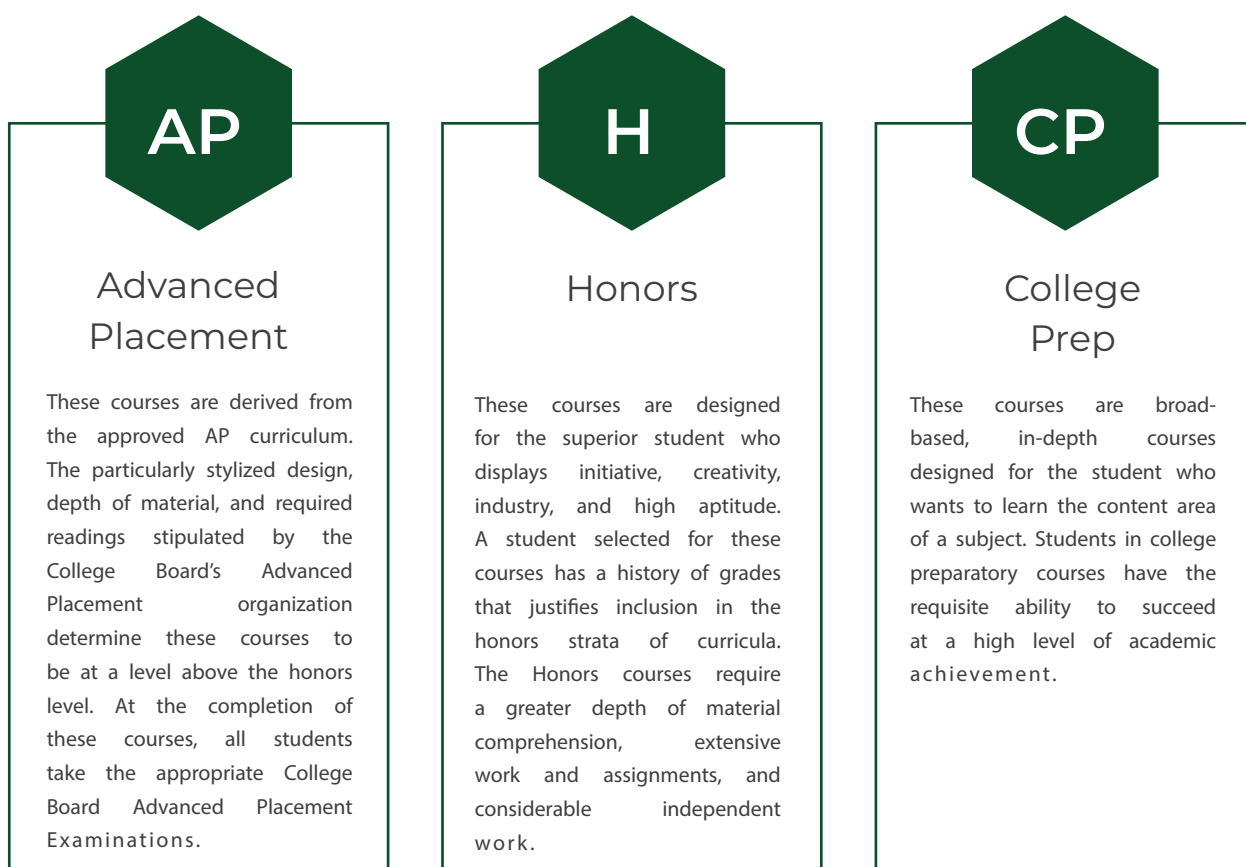
Theology	20 credits
English	20 credits
Mathematics	20 credits
Science	15 credits
Social Studies	15 credits
Physical Education, Health, Driver Education	15 credits
World Language	10 credits
Technology and Career Education (Infused)	

When electives are added, typical students have  
more than 140 credits



# COURSE LEVELS

The curriculum offerings provide for differentiated course levels. The number of levels in a department is flexible according to the needs of the students. Students are assigned to classes based on their scholastic history, teacher recommendations, past grade achievements, and test data. Periodic reviews of a student's course level assignment are conducted. If it appears justified that a student is misplaced at a course level, an opportunity will be provided for movement to a more suitable group where possible.



## GPA ADDED VALUE

For purposes of computing grade point averages, courses will be weighted in direct proportion to their assigned number of credits. All credit courses will be included in the computation.

Grades earned in Honors or AP courses are awarded GPA added values. Grades earned in Honors Courses are awarded an additional 0.33. Grades earned in Advanced Placement courses are awarded an additional 0.67.

# GRADE CALCULATIONS

In the default grade system, these are the GPA values for each grade:

A+ 4.33	A 4.00	A- 3.67	B+ 3.33	B 3.00	B- 2.67
C+ 2.33	C 2.00	C- 1.67	D+ 1.33	D 1.00	F 0.00

In a College Prep course, a B is awarded 3.00 GPA points. In an Honors level course, a B is awarded 3.33 GPA points due to the 0.33 added value. Similarly, in an Advanced Placement course, a B would be awarded 3.67 GPA points due to the 0.67 added value.

No added value points are awarded for an F in either an Honors or Advanced Placement course. Semester and cumulative averages appear on each student's semester report card.

# DUAL ENROLLMENT PROJECT ACCELERATION

The Dual Enrollment and Project Acceleration programs allow high school students to satisfy high school graduation requirements while earning college credits. Approved courses are taught by high school teachers who meet college-level educational standards. The courses are approved by partnered colleges and can be transferred as college credit. Most accepted/approved high school courses are AP or Honors level and are for Juniors and Seniors.

The present cost is \$100.00 per credit. A three-credit course will be \$300.00 at registration, which translates into savings towards college in both time and money.

Seton Hall University  
Project Acceleration



Courses marked with this symbol are a part of the Seton Hall University Project Acceleration Program.

William Paterson University  
Dual Enrollment

Courses marked with "WP" symbol are a part of the William Paterson University Dual Enrollment Program.

# THE HONORS ACADEMIES

The Academy of Science and Technology welcomed its first class in the fall of 2019. The Academy was comprised of two courses of study: Engineering and Computer Programming. Based on its resounding success, we have expanded its offerings to include Medical Science in the fall of 2020.

In addition, a second honors academy, The Academy of Arts and Humanities will accept its first class in the fall of 2020. This Academy is comprised of three courses of study as well: Arts and Letters, General Humanities, and Law and Government.

Although these courses are open to any student with the appropriate prerequisite, more rigorous sections are run for students in the academy on the honors level.

## Course Notations

Courses marked with “AST” are a part of the Academy of Science and Technology.



Courses marked with “A&H” are a part of the Academy of Arts and Humanities.



More information about the Honors Academies is available on the DePaul Catholic Website under Academics.

# FRESHMAN CYCLES

The freshmen will be exposed to various quarterly courses to assist in their high school transition and enhance the freshman experience. Courses offered may include Visual Arts 9, Music Appreciation 9, Computer Literacy, and Freshman Health.

## HONORS ADMISSIONS CRITERIA

The process used to place a student includes careful consideration of his/her standardized testing scores, historical performance, and classroom observations in the target subject area. No single instrument is perfect, but the rubric used for placement has been carefully crafted and proven. Despite best efforts in recommending placement, some students and parents may disagree with these decisions based on the student's affinity for the subject material. Parents and students are invited to discuss their concerns with the current classroom teacher and the Department Head.

The following are the general guidelines for admissions into an honors-level course. Please refer to the specific course prerequisites for the most accurate information.

### Grade 9:

HSPT minimum score in the 90th National Percentile in Language and Reading and a Composite Scoring Index (CSI) of 120

### Grade 10, 11, and 12:

PSAT EBRW score of 550 (for Humanities or 500 for Math); An A in college prep present course to advance; An A- in the present honors course to continue; Recommendation of current teacher and Department Head.

## LIKELIHOOD OF HONORS APPROVAL

COURSES WITH 2 CRITERIA:  
MEETS BOTH CRITERIA: APPROVED  
MEETS 1 OF 2: APPROVAL LIKELY  
MEETS 0 OF 2: NOT APPROVED

COURSES WITH 3 CRITERIA:  
MEETS 3 CRITERIA: APPROVED  
MEETS 2 OF 3 CRITERIA: APPROVAL LIKELY  
MEETS 1 OF 3: APPROVAL UNLIKELY  
MEETS 0 OF 3: NOT APPROVED

COURSES WITH 4 CRITERIA:  
MEETS 4 CRITERIA: APPROVED  
MEETS 3 OF 4 CRITERIA: APPROVAL LIKELY  
MEETS 2 OF 4: APPROVAL UNLIKELY  
MEETS 0 OF 1: NOT APPROVED

# THEOLOGY DEPARTMENT

## The United States Catholic Conference of Bishops (USCCB)

has instituted an integral, consistent, and rigorous Theology curriculum that will help students to come to know Jesus Christ and live the Gospel Message and values as they assume an active role in today's Church and the world. What is distinctive about the framework is its Christological emphasis and its thorough incorporation of the understanding of Divine Revelation presented in *Del Verbum*. The spiritual, intellectual, developmental, and cultural aspects of adolescence are addressed in the curriculum.

COURSE NUMBER	COURSE LEVEL	COURSE TITLE	COURSE CREDITS	GRADE LEVEL
10901	CP	Theology 9: Sacred Scripture and Christology	5	9
10902	H	Honors Theology 9: Sacred Scripture and Christology	5	9
11001	CP	Theology 10: Paschal Mystery/The Church	5	10
11002	H	Honors Theology 10: Paschal Mystery/The Church	5	10
11101	CP	Theology 11: Sacramental/Moral Theology	5	11
11102	H	Honors Theology 11: Sacramental/Moral Theology	5	11
11201	CP	Theology 12: Catholic Social Teaching/World Religions	5	12
11202	H	Honors Theology 12: Discipleship	5	12

THE "TEACHING, TOUCHING SAFETY PROGRAM"  
IS INCLUDED IN ALL GRADE LEVELS.

# THEOLOGY COURSES

## Theology 9

In the first semester of this year-long course, students are given a general knowledge and appreciation of the Sacred Scriptures. Through their study of the Bible, they will come to encounter the living Word of God, Jesus Christ. In this course, they will learn about the Bible, authored by God through Inspiration, and its value to people throughout the world. They will learn how to read the Bible and will become familiar with the major sections of the Bible and the books included in each section. The students will pay particular attention to the Gospels, where they may grow to know and love Jesus Christ more personally.

The second semester introduces students to the mystery of Jesus Christ, the living Word of God, and the Second Person of the Blessed Trinity. In this course, students will understand that Jesus Christ is the ultimate Revelation to us from God. In learning about who he is, the students will also learn who he calls them to be.

## Honors Theology 9



In the first semester of this year-long course, students are given a general knowledge and appreciation of the Sacred Scriptures. Through their study of the Bible, they will come to encounter the living Word of God, Jesus Christ. In this course, they will learn about the Bible, authored by God through Inspiration, and its value to people throughout the world. They will learn how to read the Bible and will become familiar with the major sections of the Bible and the books included in each section. The students will pay particular attention to the Gospels, where they may grow to know and love Jesus Christ more personally.

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As an honors-level course, students in this course are provided with the opportunity to integrate Scripture with selections from contemporary literature and Church documents.

## Theology 10

The first semester of this year-long course will help students understand all that God has done for us through his Son, Jesus Christ. Through this course of study, students will learn that from the first moment of creation, God has planned for us to share in Divine life as children of God the Father, sisters, and brothers of the Son, united in the Holy Spirit. This is accomplished

## Theology 10 cont'

through the Redemption Christ has won for us. Students will learn how we share in this redemption through Christ and will also be introduced to what it means to be a disciple of Jesus Christ, responding to his call in our lives.

The second semester will help the students to understand that in and through the Church, they encounter the living Jesus Christ. They will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by Him through the Holy Spirit. The students will come to know that the Church is the living Body of Christ today. This Body has both divine and human elements. In this course, students will learn not so much about the events in the life of the Church, but about the sacred nature of the Church. Also included in the second semester is a study of Christian Sexuality, through which students will come to a greater understanding of how human sexuality is rooted in our Christian faith, and the importance of this in relation to behavior.

## Honors Theology 10



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The second semester will help the students to understand that in and through the Church they encounter the living Jesus Christ. They will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by Him through the Holy Spirit. The students will come to know that the Church is the living Body of Christ today. This Body has both divine and human elements. In this course, students will learn not so much about the events in the life of the Church, but about the sacred nature of the Church. Also included in the second semester is a study of Christian Sexuality, through which students will come to a greater understanding of how human sexuality is rooted in our Christian faith, and the importance of this in relation to behavior.

As an honors-level course, students in this course are provided with the opportunity to integrate Scripture with selections from contemporary literature and Church documents. At this level, students will also develop and coordinate an end of year service retreat (Cardboard City) that will prepare them for additional service in their junior year.

# THEOLOGY COURSES CONT'

## Theology 11

The first semester of this year-long course will help students understand that they can encounter Christ today in a full and real way in and through the sacraments, and especially through the Eucharist. Students will examine each of the sacraments in detail so as to learn how they may encounter Christ throughout life.

The second semester of this course will help students understand that it is only through Christ that they can fully live out God's plans for their lives. Students are to learn the moral concepts and precepts that govern the lives of Christ's disciples.

## Honors Theology 11



The first semester of this year-long course will help students understand that they can encounter Christ today in a full and real way in and through the sacraments, and especially through the Eucharist. Students will examine each of the sacraments in detail so as to learn how they may encounter Christ throughout life.

The second semester of this course will help students understand that it is only through Christ that they can fully live out God's plans for their lives. Students are to learn the moral concepts and precepts that govern the lives of Christ's disciples. As an honors-level course, students in this course are provided with the opportunity to integrate Scripture with selections from contemporary literature and Church documents.

## Theology 12

The first semester of this year-long course will introduce students to the Church's social teaching. In this course, students are to learn how Christ's concern for others, especially the poor and needy, is present today in the Church's social teaching and mission.

The second semester of this course continues the foundation laid in the previous six courses, comparing the teaching of the Catholic Church to other traditions, both Christian and Non-Christian, with the goal of increasing human unity through fostering awareness of the great spiritual truths which are found in these other communities as well as understanding the ways in which we differ.

## Honors Theology 12



The goal of this year-long course is to provide a catholic or universal vision of unity, peace, and justice. Through the use of the written word, an understanding of spirituality, and involvement in social action, students will be challenged to explore their relationship with the global community. The course informs and challenges students to continue the work of peace and justice. Christian morality is presented as the student's personal response to societal values that may be contrary to Gospel values. The themes of Catholic Social Teaching are emphasized, and Christian values are applied. The students will be able to conform their lives with Jesus Christ as the focus of Christian living. As an honors-level course, students are provided with the opportunity to integrate Scripture with selections from contemporary literature and Church documents.

## Christian Service Program

All students are required to complete 15 hours of service each year, to total 60 hours by the end of senior year.

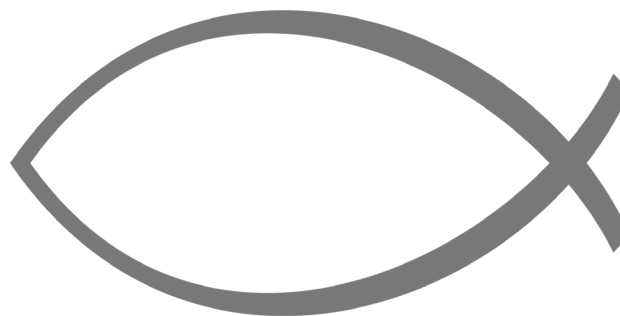
Approved ministries would include:

8th Grade - a project planned by 8th Grade Director

Freshmen/Sophomores - service to the Elderly, Sick and Dying, or Disabled Adults, and/or service to Children

Juniors - service to the Poor

Seniors - service to a site and organization of their choosing encompassing any of the approved ministries from: Elderly, Sick and Dying, or Disabled Adults, Children or the Poor.



# ENGLISH DEPARTMENT

## ADVANCED PLACEMENT ADMISSIONS CRITERIA

### ADVANCED PLACEMENT ENGLISH LANGUAGE

PSAT EBRW score of 550

A- average in English 10, Honors course;

A in college prep English 10 class to advance

Recommendation of English teacher and Department Head

Consultation with the present teacher, AP teacher, and approval of Department Head

Class size is limited.

### ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION

PSAT EBRW score of 550

A- average in English 11, Honors course;

A in college prep English 11 class to advance

Recommendation of English teacher and Department Head

Consultation with the present teacher, AP teacher, and approval of Department Head

Class size is limited.

## REQUIRED CORE COURSE OFFERINGS

COURSE NUMBER	COURSE LEVEL	COURSE TITLE	COURSE CREDITS	GRADE LEVEL
20101	CP	English 9: Introduction to Genres	5	9
20102	H	Honors English 9: Introduction to Genres	5	9
21101	CP	English 10: American Literature	5	10
21102	H	Honors English 10: American Literature	5	10
22101	CP	English 11: British Literature	5	11
22102	H	Honors English 11: British Literature	5	11
25104	AP	Advanced Placement English Language and Composition	5	11
23101	CP	English 12	5	12
23102	H	Honors English 12	5	12
25004	AP	Advanced Placement English Literature and Composition	5	12

## ELECTIVE COURSE OFFERINGS

24051	CP	Media Literacy	2.5	11, 12
28051	CP	Creative Writing	2.5	10
21151	CP	Mythology	2.5	10, 11, 12
24151	CP	Women in Literature	2.5	11, 12
24251	CP	Sports in Literature	2.5	11, 12

# ENGLISH COURSES

## English 9

In this year-long course, students study short stories, poems, plays, and novels to continue the development of their skills in close reading and understanding of literature. Student discussion focuses on the traditions of various cultures and the basic literary elements of the different genres. Essays are primarily narrative with instruction and practice in development methods, selection and arrangement, unity, transition, points of view and use of sensory images. Students continue their vocabulary development and practice grammatical and usage conventions as appropriate to their composition development. They begin to develop four-year writing portfolios that provide opportunities for evaluation and self-assessment.

## Honors English 9



In this year-long course, the students develop skills of literacy while encouraging independent and higher-level critical thinking. Through an integrated program of literature, grammar, vocabulary, and writing, students gain the skills needed to become more discerning readers and writers. A genre-based study of literature, non-fiction, and fiction, includes selections that challenge analytical abilities at a more advanced level. Writing instruction emphasizes writing as a process and guides students to construct clear and well-supported literary analysis while introducing other forms of discourse. A willingness to take academic risks and participation in class discussions is expected. Learning to become discriminating users of the internet for research and collaboration is also taught. Students begin to develop four-year writing portfolios that provide opportunities for evaluation and self-assessment.

## English 10

In this chronological year-long survey emphasizing knowledge of Western literary heritage, students read major writers of American literature from the Colonial period to the 21st century. In composition instruction, students practice both expository types and narrative skills, including aspects of voice, tone, dialogue, imagery, and characterization. Course objectives also include vocabulary development, grammar review, and practice in specific SAT/ACT skills. The writing portfolio continues to develop and expand.

## Honors English 10



In this chronological year-long survey students read major writers of American literature from the Colonial period to the 21st century. This course reinforces and expands the literary analysis and writing skills taught and practiced in the 9th grade honors level course. Literature, grammar, vocabulary, and writing assignments serve to advance comprehension while strengthening the students' ability to formulate and express well-founded ideas. Both the pace of instruction and choice of literature reflect a higher level of expectation in terms of the students' ability to explicate the writer's purpose

## Honors English 10 cont'

and use of rhetorical strategies. Students are expected to demonstrate a willingness to rely on an independent analysis in class discussion and written work. The writing portfolio continues to develop and expand.

## English 11

In this year-long survey, students read major British writers. Students engage in literature that encompasses the themes, diversity, and complexity that characterize British thought and society. Practice in analytical and persuasive essays encourages clearer thinking and more effective writing. The study of vocabulary and grammar continues, supporting the students' preparation for the SAT/ACT and the college application process. The writing portfolio continues to develop and expand. The MLA research process is further practiced resulting in the completion of a well-documented research paper.

## Honors English 11



In this year-long survey, students read major British writers. Students engage in literature that encompasses the themes, diversity, and complexity that characterize British thought and society. Select works in this honors course require a higher level of both critical reading skills and independent analysis from students. Practice in analytical and persuasive essays encourages an increasingly mature quality of writing that evidences original thought. The study of vocabulary and grammar continues, supporting the students' preparation for the SAT/ACT and the college application process. The writing portfolio continues to develop and expand. The MLA research process is further practiced resulting in the completion of a well-documented research paper.

## AP English Language and Composition



A summer assignment is required.

This year-long course prepares students for the higher-level reading and writing skills used in college. The course places an emphasis on rhetoric and composition with particular attention to argumentative, narrative and expository works. This course promotes critical reading and writing with attention to the nuances of language, stylistic distinction, purpose, and audience. Students learn to recognize specific devices such as narrative structure, selection of detail, and manipulation of language, tone, diction, allusion, imagery, and syntax. This class nurtures students' growth as mature, critical, and creative thinkers.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.

# ENGLISH COURSES CONT'

## English 12

This year-long course returns to the earlier genre approach to studying short fiction, drama, poetry, and novel with the continued development of student skills in reading imaginative literature. The reading selections extend from the classics of world literature to multi-cultural contemporary pieces. Students deepen their appreciation of literature and its role in explaining the universal condition and the perspectives of different cultures and societies, past and present. This course also includes vocabulary development, grammar review and practice in specific SAT/ACT skills as needed. The writing portfolio continues to develop and expand. The MLA research process is further practiced resulting in the completion of a well-documented research paper.

## Honors English 12



This year-long course returns to the earlier genre approach to studying short fiction, drama, poetry, and novel with the continued development of students' skills in reading imaginative literature. The reading selections extend from the classics of world literature to multi-cultural contemporary pieces. Students deepen their appreciation of literature and its role in explaining the universal condition and the perspectives of different cultures and societies, past and present. Students in this course should have well-developed communication skills and the ability and confidence to interpret literature independently. Exposure to literary criticism is integrated into textual analysis. Assessment includes reaction/reflection papers, formal and personal essay and multi-media presentations. Students are also expected to be creative and critical thinkers in their oral and written work. This course also includes vocabulary development, grammar review and practice in specific SAT/ACT skills as needed. The writing portfolio continues to develop and expand. The MLA research process is further practiced resulting in the completion of a well-documented research paper.

## AP English Literature and Comp.



A summer assignment is required.

This year-long course stresses representative classic literary works from different genres, including essay, poetry, drama, and novel. Analysis of meaning, idea, and style is stressed rather than historical background or factual material. Students develop their understanding of how writers use language to provide both meaning and pleasure to their readers. Students learn to analyze and interpret literature through various critical perspectives. Students practice careful observation of textual detail, establishing connections among their observations and drawing inferences from those connections. Writing instruction focuses on the critical analysis of literature, improving students' abilities to explain clearly and cogently their understanding and interpretation of the literary works they have read. The class is conducted in a seminar style with the emphasis on discussion and evaluation.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.

## Media Literacy

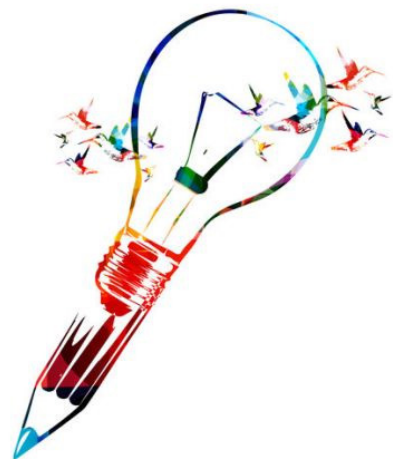
Media Literacy is a semester course designed to help students develop an informed and critical understanding of mass media – as information sources, as entertainment, and as an industry – as well as to examine, interpret, and evaluate the messages contained within and their social, cultural, and political implications. This course exposes students to the complexities of media and provides the methods of analysis necessary to interpret media content as well as methods of critical writing appropriate to media analysis. In addition, this course emphasizes the skills and knowledge required to produce the school newspaper, The Emerald.

## Creative Writing

This semester course provides students with opportunities to develop their literary talents. It emphasizes the development of skills in the creation and study of prose, drama, and poetry in an intensive workshop setting. Students are required to write in a variety of genres and to demonstrate a facility for giving and receiving constructive criticism. Students will demonstrate a better understanding of, and facility with, the revision and writing process through mastery of editing skills. Students will contribute their writing to Impressions, our literary magazine, and will gain knowledge about publication.

## Mythology

This semester course is a survey of ancient Greek and Roman stories about heroes, gods, and the universe. It illustrates the influence of these myths on the art, literature, and culture of the modern world.



# ENGLISH COURSES CONT'

## Sports in Literature

This semester class will focus on the connection between sports and literature. The competition, spectacle, personal struggle, and exaggerated personalities so characteristic of those involved in sports provide the perfect backdrop to look deeply into human nature and create literature that transcends sports itself. Themes studied will include leadership and character, definitions of success and failure, hero worship, rivalries, and fate. Novels, short stories and articles will be studied.

## Women in Literature

This semester course introduces students to female authors of fiction, poetry, and critical theory from around the world. The course is aimed at providing students with a historical approach to understanding literature by female authors. Some authors we will focus on will be Willa Cather, Joyce Carol Oates, Kate Chopin, Maya Angelou, Emily Dickinson, Mary Shelley, and Virginia Woolf. Students will learn to understand, analyze, and evaluate reading materials; write timed, impromptu essay responses; edit and revise compositions; and provide an effective, well-organized, fully developed presentation.

# WORLD LANGUAGES DEPARTMENT

## ADVANCED PLACEMENT ADMISSIONS CRITERIA

### ADVANCED PLACEMENT SPANISH LANGUAGE

PSAT EBRW score of 550

Grade of B+ for Spanish 3, Honors and/or Spanish 4, Honors

Recommendation of present World Language teacher and Department Head

## COURSE OFFERINGS

COURSE NUMBER	COURSE LEVEL	COURSE TITLE	COURSE CREDITS	GRADE LEVEL*
32101	CP	Italian 1	5	9
32201	CP	Italian 2	5	10
32301	CP	Italian 3	5	11
32302	H	Honors Italian 3	5	11
32402	H	Honors Italian 4	5	11, 12
31101	CP	Spanish 1	5	9
31502	H	Honors Spanish 1	5	9
31201	CP	Spanish 2	5	10
31202	H	Honors Spanish 2	5	10
31301	CP	Spanish 3	5	11
31302	H	Honors Spanish 3	5	11
31402	H	Honors Spanish 4	5	11, 12
31404	AP	Advanced Placement Spanish Language	5	11, 12

\*UPPERCLASSMEN MAY TAKE LEVEL 1 OR 2 LANGUAGES AS AN ELECTIVE

# WORLD LANGUAGE COURSES

## Italian 1

This first-year course in Italian presents the student with the elements needed to develop the skills of listening, speaking, reading and writing in the target language. Grammar, thematic vocabulary and basic syntax are supported by written and oral drills. Appropriate grade-level reading and writing assignments, cultural materials and situations for cooperative learning experiences are provided.

## Italian 2

This second-year program in Italian continues to build on the structures presented in Italian I. Emphasis is placed on the development of vocabulary, grammatical structures, and syntax. Skills in oral communication, writing, and reading for comprehension are stressed.

## Italian 3 NOT OFFERED IN 2023-2024

This third-year course provides students with the development and reinforcement of the structures and syntax previously learned. Students acquire a larger vocabulary related to different situations, in order to stress the four communication skills of reading, writing, listening and speaking. Students also gain more knowledge about Italian history, culture, and traditions. Italian 3 completes the cycle for college prep students.

## Honors Italian 3



This third-year course of study continues the development of grammar and syntax. Advanced vocabulary is presented and skills in writing and reading are reinforced. Students learn about Italian cultural contributions made by the Italian people.

## Honors Italian 4



This year-long course provides students with the opportunity to apply vocabulary, grammar and syntax previously acquired. The focus of study is the further development of the essential communication skills of speaking and listening. The use of the target language in creative writing projects is essential. Reading skills are enhanced by a variety of materials representative of Italian authors.

## Spanish 1

This first-year course in language endeavors to provide the student with the four essential skills needed for foreign language acquisition: to speak so as to be understood, to listen and be able to understand, to read with comprehension and to write with clarity. Current, relevant vocabulary is presented thematically, and grammar structures and basic rules of usage and syntax are included. Textbooks, workbooks and student manuals provide reading selections and cultural materials for cooperative learning and formal grammar presentation.

## Honors Spanish 1

This Honors Spanish 1 year-long course is prepared for students who obtain a grade of a B+ or higher on the Spanish placement exam. During the first year of Spanish class, students are exposed to different topics including standard grammar, present and past tense. Relevant vocabulary is presented thematically. This course helps students to expand their knowledge of the four elements of language: reading, writing, listening, and speaking.

## Espanol en Espanol NOT OFFERED IN 2023-2024

This year-long course is designed for Freshman students who are Heritage Language Speakers or Native Language Speakers who have basic reading and writing skills and verbal communication. During their first year in high school, students can refine these skills, improve comprehension, and learn about Latin culture as they prepare to enter the third level of Spanish as a sophomore.

The prerequisite for this course is to be a Heritage Language Speaker (HLS) or a Native Spanish Speaker (NSS):

Heritage Language Speakers (HLS): Students who are from homes where Spanish is spoken. They have experience with verbal communication.

Native Spanish Speakers (NSS): Students whose native language is Spanish. NSS have some experience with verbal communication and basic reading and writing skills.

## Spanish 2

This year-long course presents the more complex structures of the Spanish language and expands the cultural themes presented in the first level. By the end of the year, the student has acquired a command of the key vocabulary and structures necessary for personal communication, as well as an appreciation of the breadth and variety of the Spanish-speaking world. Readings appropriate for the students' skill level are used to reinforce the grammar and structure presented.

## Honors Spanish 2

Created for advanced students, this year-long course presents the more complex structures of the Spanish language and expands the cultural themes presented in the first level. By the end of the year, the student has completed an extensive study of grammar and vocabulary, with emphasis on speaking and reading skills. Various readings in the target language reinforce the grammar and structure presented.

# WORLD LANGUAGE COURSES CONT'

## Spanish 3

This year-long course allows the student to further his ability to hear and express him/herself in the language in a natural manner. Presentation of the vocabulary units enables the student to learn many synonyms, antonyms, and idioms in a conversational mode, which presents the language in a practical setting. Examples of a variety of literary forms are presented for study, including prose and poetry. Spanish 3 completes the cycle for college prep students.

## Honors Spanish 3



A summer assignment is required.

This year-long course is designed for advanced students who may wish to continue the study of the target language in college. It includes an extensive study of grammar, development of vocabulary, more sophisticated composition work and opportunity for oral expression. Students also read a variety of short stories by representative Hispanic authors, and research about famous Latin painters and popular artists.

## Spanish 4

NOT OFFERED IN 2023-2024

Short readings in the target language are studied in class to reinforce comprehension, verbal, and writing communication skills.

## Honors Spanish 4



A summer assignment is required.

This advanced-level year-long course provides the student with ample opportunity to finely hone the target communication skills acquired in the previous years of study. A general survey of literary works representative of a variety of centuries and genres and a cross-section of Spanish and Hispanic authors is presented. Through an extensive program of grammar, vocabulary and writing practice, students gain the skills needed to become better readers, writers and speakers of the target language.

Students read and discuss short stories that present the opportunity to reinforce reading, speaking, listening, and writing skills through individual and group class activities. Honors Spanish 4 is a rigorous course that prepares students to continue working in the acquisition of the language in college.

## Advanced Placement Spanish Language

A summer assignment is required.

Through a variety of exercises and activities, students' skills in the target areas of grammar, vocabulary, composition, and oral communication are strengthened and refined in this year-long course.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.



# MATHEMATICS DEPARTMENT

## ADVANCED PLACEMENT ADMISSIONS CRITERIA

### ADVANCED PLACEMENT CALCULUS AB AND BC

PSAT Math score of 500

B+ average in Honors Precalculus

Honors Physics taken prior to or concurrently with is strongly recommended

Recommendation of current Math teacher and Department Head

### ADVANCED PLACEMENT STATISTICS

PSAT EBRW and Math score of 550

B average in Algebra 2 or Honors Algebra 2

Concurrently in a Precalculus or Calculus course

Recommendation of current Math teacher and Department Head

## REQUIRED CORE COURSE OFFERINGS

COURSE NUMBER	COURSE LEVEL	COURSE TITLE	COURSE CREDITS	GRADE LEVEL
40100	CP	Foundations of Algebra 1	5	9
40001	CP	Algebra 1	5	9
40002	H	Honors Algebra 1	5	9
42000	CP	Foundations of Geometry	5	10
42001	CP	Geometry	5	10
42002	H	Honors Geometry	5	9, 10
43000	CP	Foundations of Algebra 2	5	11, 12
43001	CP	Algebra 2	5	11, 12
43002	H	Honors Algebra 2	5	10, 11
44001	CP	Precalculus	5	11, 12
44002	H	Honors Precalculus	5	11, 12
46000	CP	Selected Topics in Discrete Math	5	12
47001	CP	Trigonometry	5	12
45001	CP	Calculus	5	11, 12
45002	H	Honors Calculus	5	11, 12
45004	AP	Advanced Placement Calculus AB	5	11, 12
45101	AP	Advanced Placement Calculus BC	5	12

## ELECTIVE COURSE OFFERINGS

48004	AP	Advanced Placement Statistics	5	11, 12
40151	CP	Financial Literacy	2.5	10, 11, 12
48851	CP	Introduction to Statistics	2.5	11, 12

# MATHEMATICS COURSES

Department approval (prior teachers, present teacher, and department head) is required for all Mathematics courses. In addition to the general requirements found on Page 8, please note the criteria listed for each course. Freshmen are placed in the appropriate level course based on the placement tests.

## Foundations of Algebra 1

This year-long course is especially designed and structured for the student who will benefit from reinforcement, practice, and drill. The student's fundamental mathematical skills are sharpened while the student is introduced to elementary Algebraic topics. The course includes the development of relations, functions, mathematical sentences, and their graphs from simple linear equations to quadratic functions.

## Algebra 1

This year-long course is a modern treatment of elementary algebra, with a balance of concentration on concepts and on skills. Fitting within the logical structure of algebra, there is a progression from the natural numbers to a basic understanding of the real number system. The course includes the development of relations, functions, mathematical sentences, and their graphs, from simple linear equations and functions to systems of linear equations, quadratic equations, and functions. Emphasis is placed on critical thinking and problem-solving skills, as well as on real-life applications.

## Honors Algebra 1

This year-long course is designed for freshmen in the Honors program. It will cover the main topics in the college prep Algebra 1 course and, in addition, an in-depth study of other topics of Algebra 1 with emphasis on more advanced and original problem-solving techniques and applications. Selected advanced topics are covered according to group background.

## Foundations of Geometry

Prerequisite: Completion of Algebra 1 with lower than a C.

This year-long course is designed for students who need reinforcement in mathematical concepts. The topics covered are the same as those in Geometry. The course is structured so that student proof-writing is approached in an informal manner. Student eligibility is determined by the Mathematics Department.

## Geometry

Prerequisite: C or higher in Algebra 1

This year-long course introduces the students to techniques of logical reasoning while at the same time strengthening their basic algebraic skills. The students develop the ability to interpret and intuitively approach such areas as coordinate geometry, solid geometry, and practical applications of geometric principles.

## Honors Geometry

Prerequisite: Completion of Algebra 1 with a grade of A or A+ in CP or B+ in Honors.

This year-long course includes an in-depth study of the topics of Euclidean geometry. The use of manipulative and geometric constructions allows for the discovery of postulates and theorems. Emphasis is placed on the development of inductive and deductive reasoning skills, problem-solving, the connection between geometry and algebra, and practical applications.

## Foundations of Algebra 2

Prerequisite: Completion of Algebra 1, Foundations and Geometry, Foundations or the completion of Algebra 1 and Geometry with grades lower than a C.

This year-long course is designed to follow Foundations of Geometry. The topics covered are the same as those taught in Algebra 2. However, this course is especially designed and structured for those students who need reinforcement, practice, and drill in the fundamental concepts of algebra.

## Algebra 2

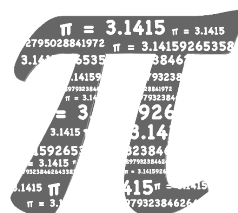
Prerequisite: Successful completion of Algebra 1 and Geometry with grades of C or higher in both.

This year-long course is a second course in Algebra. Following a brief review of the topics of Algebra 1, the course includes the study of the following topics: complex numbers, quadratic equations, systems of equations, variation, compound inequalities, functions, radicals, and problem-solving. Algebra 2 may be followed by Precalculus or Trigonometry in senior year.

## Honors Algebra 2

Prerequisite: Sophomores - Successful completion of Algebra 1, Honors with a grade of B+ or higher or Algebra 1, CP with a grade of A-. Juniors - Successful completion of Algebra 1, Honors and Geometry with grades of B+ or higher in both or Algebra 1, CP and Geometry with grades of A- in both.

This year-long course is designed to cover the main topics in the college prep Algebra 2 course and, in addition, higher-degree equations, plane trigonometric functions, and trigonometric identities and formulae.



# MATHEMATICS COURSES CONT'

## Precalculus

Prerequisite: Completion of Algebra 2 with a grade of C or higher or completion of Algebra 2, Honors with a grade lower than B. This course is broad in scope, including the following topics: analytical geometry, trigonometry, conic sections, elementary polynomial functions, curve sketching, exponential and logarithmic functions, inequalities in one and two variables, and matrices. The graphing calculator is used in this course.

## Honors Precalculus

Prerequisite: Completion of Algebra 2, Honors with a grade of B+ or higher. Taking Honors Physics concurrently is strongly recommended.

In this year-long course, the student is expected to gain deeper insight into the underlying structures of mathematics. The course is designed for mathematically oriented students who have demonstrated superior ability in Algebra 1, Geometry and Honors Algebra 2. Honors Precalculus is presented from the numeric, graphic and algebraic approach and incorporates the use of a graphing calculator. The following topics are included: statements and sets in mathematics, ordered fields, induction, sequences and series, algebra of functions, exponential and logarithmic functions, trigonometric functions and equations, algebra of vectors, plane analytic geometry of points and lines, analytic geometry and matrices, and an introduction to the derivative.

## Selected Topics in Discrete Math

Prerequisite: Completion of Algebra 2, Foundations.

This year-long course is designed for those seniors who have successfully completed Foundations of Geometry and Foundations of Algebra 2. The course includes a variety of selected mathematical topics designed to improve the students' mathematical ability and to strengthen the students' critical thinking skills. Topics will be included from Algebra, Probability, Statistics, Logic and Personal Finance.

## Trigonometry

Prerequisite: Completion of Algebra 2 with a grade lower than C.

Topics in this year-long course include plane trigonometric functions and trigonometric identities and formulas. Emphasis is placed on the reinforcement of Algebra skills and on integrating topics of Algebra and Trigonometry. The

## Calculus

Prerequisite: Completion of Precalculus or Honors Precalculus with a Teacher and Department Head Recommendation.

The topics include a review of elementary functions, analytical geometry, and trigonometry, together with the concept of limits, and curve sketching. The remainder of the course is devoted to the development of the differential and integral calculus in an informal manner. This year-long CP level course will concentrate on the mechanics of the topics.

## Honors Calculus

Prerequisite: Successful completion of Precalculus or completion of Honors Precalculus.

The topics include a review of elementary functions, analytical geometry, and trigonometry, together with the concept of limits, and curve sketching. The remainder of the course is devoted to the development of the differential and integral calculus in an informal manner. This honors-level year-long course will include applications and analysis of the topics.

## Advanced Placement Calculus AB

Prerequisite: Completion of Precalculus, Honors with a grade of B+ or higher. Taking Honors Physics prior to or concurrently is strongly recommended.

## AP Calculus BC

NOT OFFERED IN 2023-2024

The Advanced Placement Calculus offers two year-long courses, the AB Calculus and the BC Calculus. The AB Calculus course is a college-level course and will be approved only for students who have demonstrated superior ability in Honors Precalculus. The topics covered are those prescribed by the Advanced Placement Program of the College Board. A graphing calculator is used extensively to ensure a course that approaches topics numerically, graphically, and algebraically. The BC Calculus course is a continuation of the AB Calculus and is offered to those students who have successfully completed AB Calculus. This course is rigorous in nature and the topics covered are those prescribed by the Advanced Placement Program of the College Board.

Students in either course must take the AP Calculus Exam and could earn up to eight college credits. There is an additional fee for each exam.

## Advanced Placement Statistics

Prerequisites: Completion of Algebra 2, or Algebra 2, Honors with a grade of B or higher, competency in written communication, concurrently taking a Precalculus or Calculus course.

This year-long course is a college-level course in which the graphing calculator is used extensively. Students will be expected to analyze data using the exploratory and inferential techniques covered in the AP Statistics course description.

Students in this course must take the AP Statistics exam for which there is an additional fee.

# MATHEMATICS COURSES CONT'

## Financial Literacy

This semester course is a requirement for graduation. This course will include financial, economic, business, and entrepreneurial literacy. Students will learn how to make personal economic choices that are appropriate for someone in their financial standing. An understanding of the role of the economy in society will be included as well as how to use entrepreneurial skills to improve productivity in the workplace and professional opportunities.

## Introduction to Statistics

Prerequisites: Completion of Algebra 2, or Algebra 2, Honors with a grade of B or higher. Concurrently taking a Precalculus or Calculus course and teacher and Department Head recommendations also required.

This semester elective course will involve creating hypotheses, making predictions, testing, and analyzing. Students will study the relationship between statistical data and a range of topics, including independent events, hypothesis testing, descriptive statistics, random variables, distributions, regression, and inferential statistics.

# SCIENCE DEPARTMENT

## ADVANCED PLACEMENT ADMISSIONS CRITERIA

### ADVANCED PLACEMENT BIOLOGY

### ADVANCED PLACEMENT CHEMISTRY

### ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE

PSAT Math score of 550

A minimum final grade of B in Honors level courses in Biology, Chemistry, Algebra 2, and/or Precalculus; or a minimum final grade of B+ in college-prep Biology, Chemistry, and Algebra 2.

Recommendation of present Science teacher and Department Head

### ADVANCED PLACEMENT PHYSICS

PSAT Math score of 550

A minimum final grade of B in all previous science courses

A minimum final grade of B in Algebra 2 or currently enrolled in Algebra 2

A minimum final grade of B in Honors Physics

Recommendation of present Science teacher and Department Head

# SCIENCE DEPARTMENT CONT'

## REQUIRED CORE COURSE OFFERINGS

COURSE NUMBER	COURSE LEVEL	COURSE TITLE	COURSE CREDITS	GRADE LEVEL
50000	CP	Foundations of Biology	5	9
50001	CP	Biology	5	9
50002	H	Honors Biology	5	9
51000	CP	Chemistry in the Community	5	10
51001	CP	Chemistry	5	10
51002	H	Honors Chemistry	5	10

## ELECTIVE COURSE OFFERINGS\*

50004	AP	Advanced Placement Biology	5	11, 12
51004	AP	Advanced Placement Chemistry	5	11, 12
55004	AP	Advanced Placement Environmental Science	5	11, 12
53001	CP	Environmental Sciences	5	11, 12
52004	AP	Advanced Placement Physics 1	5	11, 12
52001	CP	Physics	5	11, 12
52002	H	Honors Physics	5	11, 12
57101	CP	Earth and Space Science	5	11, 12
56001	CP	Human Anatomy and Physiology	5	11, 12
56002	H	Honors Human Anatomy and Physiology	5	11, 12
56101	CP	Exercise Science/Introduction to Sports Medicine	5	12
51102	H	Honors Health and Disease	2.5	9
51151	CP	Forensic Science	2.5	11, 12
55051	CP	Genetics	2.5	10, 11, 12
55052	H	Honors Genetics	2.5	10, 11, 12
57052	H	Honors Microbiology	2.5	10, 11, 12
59152	H	Honors Current Topics in Biological Research	2.5	11, 12
59152	H	Honors Histology	2.5	11, 12

\*15 CREDITS OF SCIENCE ARE REQUIRED FOR GRADUATION

In addition to the general requirements found on Page 8, please note the criteria listed for each course. Freshmen are placed in the appropriate level course based on the placement tests.

# SCIENCE COURSES

## Foundations of Biology

This year-long course presents a unique view of biological concepts in animal and plant studies, human physiology, disease, and consumerism. Students are held responsible for traditional concepts while being exposed to the ramification of biology in everyday life. The information is presented in a way that students can not only establish in their own minds a reason for knowing something but can also translate experiences into relationships, applying these relationships to their lives in a concrete way.

## Biology

This year-long course is a cellular approach to the study of life. The aim is to develop an understanding of the problems and generalizations of life science. The text used stresses an inquiry approach both in the classroom and in lab work. The subject matter includes a study of the nature of life, organism, continuity of life, physiology, evolution, and ecology.

## Honors Biology

In this year-long course, students are introduced to the basic concepts of biology and will further examine this information as a study of the greater theme of life as it exists in nature. The biological processes of living things are studied in detail, from basic cellular processes to the systems of multicellular organisms. The subject matter includes a study of the nature of life, organism, continuity of life, physiology, evolution, and anatomy. Laboratory exercises complement the current work being discussed in the classroom.

## Chemistry in the Community

Prerequisites: Completion of Algebra 1 Foundations, Biology Foundations, or completion of Algebra 1, CP Biology with a grade lower than a C+ in both courses.

This year-long course provides a foundation for future scientific study. Concepts of Chemistry are explored with emphasis on the periodic table, laboratory experiments, demonstrations and mathematical solutions.

## Chemistry

Prerequisites: Completion of Algebra 1 and Biology with a minimum final grade of B or completion of Algebra 1, Honors and Biology, Honors with a minimum final grade lower than a C+. Strong analytical and Algebraic skills are necessary to be successful in this level course. Students will leave this year-long course with the ability to solve problems using a factor-label (dimensional analysis) method, significant figures, and algebraic manipulation of symbolic equations. Topics of study include atomic structure and theory, chemical bonding, chemical reactions, gas laws, acids and bases, and stoichiometry. The course combines lectures, self-study, traditional laboratory exercises, and experimental design to enhance understanding of the big ideas in chemistry.

## Honors Chemistry

Prerequisites: A- in both Algebra 1 and Biology or B in Algebra 1, Honors and Biology, Honors.

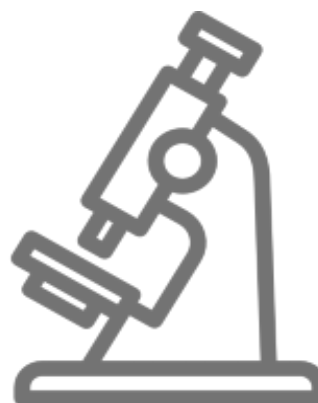
This year-long chemistry course is designed for students who are considering a science career and who have shown superior aptitude and interest in science and mathematics. The emphasis is on quantitative, analytical, and problem-solving skills. Topics include modern atomic theory, periodic properties and laws, bonding and molecular dynamics, stoichiometric relationships, gas laws, thermodynamics, acid-base reactions, kinetics, electrochemistry, nuclear chemistry, and equilibrium.

## Advanced Placement Biology

A summer assignment is required.

This year-long course is a lab-based course that is a rigorous survey of the major biological themes. Because of the ongoing information explosion in biology, the goals of this course cannot be based solely on the accumulation of facts and technical details. Rather, students are expected to develop a framework for modern biology in which they understand concepts and themes that integrate and unify the major topics and science as a process of inquiry. The course emphasizes the development of thorough and accurate observation skills, and the careful consideration of facts to substantiate the thoughts and ideas. Heavy reading assignments reinforce the material presented in class. Content areas that are stressed include biochemistry, organic chemistry, cell physiology, genetics, microbiology, ecology, and evolution. There is a heavy emphasis on laboratory work and the ability of the student to combine lecture information with readings for problem-solving and further investigation.

Students in this course must take the AP Biology examination in May for which there is an additional fee.



# SCIENCE COURSES CONT'

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## Adv. Placement Chemistry

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A summer assignment is required.

Advanced Placement Chemistry is a highly-mathematical, introductory college-level year-long course that builds upon the knowledge base gained in a first-year chemistry course. This course emphasizes inquiry and reasoning skills as methods to develop enduring understandings. The areas of study include but are not limited to: the structure of matter, the properties of matter, chemical reactions, rates of chemical reactions, thermodynamics, and equilibrium. Students will be required to do independent research and reading, write formal lab reports, and think analytically about problems they may never have encountered before.

Students will be engaged in hands-on laboratory work, integrated throughout the course, which accounts for a minimum of 25% of the course time.

Students in this course must take the AP Chemistry examination in May for which there is an additional fee.

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## Advanced Placement Environmental Science

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A summer assignment is required.

The goal of this year-long AP Environmental Science course is to provide the students with scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. The AP Environmental Science course is demanding and designed to be the equivalent of a one-semester, introductory college-level course in Environmental Science. Environmental Science is interdisciplinary; it embraces a wide variety of topics from different areas, which include concepts of geology, biology, chemistry, and geography.

Areas of study include the structure and function of aquatic ecosystems and biomes, system modeling of ecosystems, population dynamics, nutrient cycles, human population growth, global atmospheric interactions, energy production, pollution, biodiversity, and deforestation. Students perform a significant amount of fieldwork in the form of observation and data collection on local ecosystems.

Students in this course must take the AP Environmental Science examination in May for which there is an additional fee.

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## Adv. Plcmnt Physics 1

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Prerequisite: Completion of Honors Physics with a minimum final grade of B.

A summer assignment is required.

This year-long course is a rigorous math-based course. It is designed to be equivalent to the first semester of an introductory college-level Algebra-based physics course. Students choosing to take this class will find it challenging, with extended study time requirements outside of class. On average, the student is expected to spend one hour on homework problems each night, with additional time spent reviewing the chapter in the book and examining homework solutions from the previous night's work.

Students are required to apply the principles learned in class to problem-solving in homework, test, and laboratory settings. The major topics of study include kinematics, Newtonian mechanics, energy, harmonic motion, waves, sound, electrostatics, and simple electric circuits.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.

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## Physics

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Pre- or Co-requisite: Precalculus and completion of Algebra 2 with a minimum final grade of B.

A summer assignment is required.

This year-long course introduces students to the study of physics conceptually by studying physical phenomena, and by requiring them to describe those phenomena computationally and graphically, both in the classroom and the laboratory. The behavior of our physical universe is studied through the following topics: kinematics, dynamics, momentum, energy, thermodynamics, waves, light, optics, sound, electricity, and magnetism.

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## Honors Physics

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Pre- or Co-requisite: Honors Precalculus and completion of Algebra 2, Honors with a minimum final grade of B.

A summer assignment is required.

This year-long course introduces students to the study of physics conceptually by studying physical phenomena, and by requiring them to describe rigorously, those phenomena computationally and graphically, both in the classroom and the laboratory. The behavior of our physical universe is studied through the following topics: kinematics, dynamics, momentum, energy, thermodynamics, waves, light, optics, sound, electricity, and magnetism.

# SCIENCE COURSES CONT'

## Earth and Space Science

This year-long capstone science course is designed to cover space, earth, ocean, and atmospheric sciences in a rigorous, quantitative fashion, and builds on previous courses in biology, chemistry, and physical science by repeating and reinforcing content knowledge and problem-solving skills learned in those courses but used now in an earth science context. Earth and Space Science is a course focusing on the study of the Earth's lithosphere, atmosphere, hydrosphere, and its celestial environment. Students enrolled in this course analyze and describe Earth's interconnected systems and how they are changing due to natural processes and human influence. Topics covered include rocks, minerals, natural resource management, sculpturing of Earth's surface, plate tectonics, earthquakes, volcanoes, geologic history, the atmosphere, weather, climate, history of astronomy, the solar system, stars, and galaxies.

## Human Anatomy and Physiology

Prerequisite: C in Biology, Honors or C+ in college prep Biology. The objective of this year-long course is to present the student with the study of the anatomy and physiology of the life processes of the human body. The course focuses on anatomical terminology, anatomical identification, and physiological processes of human body systems. It will stress an inquiry approach both in class and lab work.

## Honors Human Anatomy and Physiology



Prerequisite: B in Biology, Honors or B+ in college prep Biology. The objective of this year-long course is to present the student with an in-depth study of the anatomy and physiology of the life processes of the human body. It includes such topics as locomotion, regulation, circulation, and digestion. The major portion of the lab work involves dissecting a mink and a fetal pig. This course should be considered a must for any eligible student who is considering a career in the medical, health-related, or biological fields.

## Environmental Science

Every day our environment changes. What is our role in the change? What can we do to effect positive change? This year-long course takes an interdisciplinary approach to introduce students to the science that runs our planet. Students will learn how to identify and analyze environmental problems, evaluate risks associated with these issues, and examine alternative solutions. Students complete field investigations about the ecosystem that is our school campus and how the school fits into the greater environment.

## Exercise Science/Intro to Sports Medicine



Prerequisite: B in any level of Anatomy and Physiology. Recommendation of both Physical Education and Science Department Heads.

This year-long course has a practicum to be completed outside of school hours with a member of the Athletic Training staff as a required component of the course.

Students taking this course will examine the relationship between exercise and human performance and the role of physical activity in the promotion of healthy lifestyles. Exercise science consists of several overlapping disciplines, including biomechanics, exercise physiology and biochemistry, growth and development, exercise nutrition, measurement and evaluation, and exercise psychology. The program of study is designed to provide an effective blend of classroom instruction and practical experience.

Additional focus will be on prevention, immediate care, clinical evaluation, diagnosis, treatment, and rehabilitation of athletic injuries. Students will also learn about the professional responsibility of athletic trainers as well as the organization and administration required within the profession.

## Honors Health and Disease



This semester course is designed to explore aspects of human health and disease and the role of modern medicine in treating and preventing health disorders. It is a companion for students of Honors Biology, encompassing not only infectious and non-infectious disease, but the nature of immunity, immune system dysfunction, preventative and diagnostic techniques, and treatments for disease.

## Forensic Science

Prerequisites: Successful completion of any level Biology and Chemistry course.

This semester course is an introduction to the study of Forensic Science and includes the following topics: History of Forensic Science, the crime scene, physical and biological evidence collection and analysis, microscopic investigations, hair and fiber analysis, determination of the time of death, and insect study. DNA evidence is also covered along with computer, document, and voice recognition as evidence.

Disclaimer: Some of the course content may be unpleasant.

# SCIENCE COURSES CONT'

## Genetics

Prerequisite: C+ in Biology

This semester course introduces students to the study and concepts of genetics and molecular biology. Topics include mitosis and meiosis, Mendelian genetics, chromosome mapping, DNA structure and replication, gene expression and regulation, genetic mutations and genetic disorders.

## Honors Genetics

Prerequisite (Gr. 11, 12): B+ in Biology.

Prerequisite (Gr. 10): B+ in Biology, Honors;

This honors-level semester course includes the same topics as the CP level course but with a more thorough and complex approach, building upon knowledge attained in the honors level Biology course.

## Honors Microbiology

Prerequisite (Gr. 11, 12): B+ in Biology.

Prerequisite (Gr. 10): B+ in Biology, Honors.

This semester course introduces students to the study of microorganisms and the techniques of microbiology. This course examines the history of microbiology, the structure of bacterial cells, the nature of bacterial cultures, and the conditions necessary for the growth of bacteria and the study of diseases caused by microorganisms.

## Honors Current Topics in Biological Research

Prerequisite: B in Biology;

This semester course includes a wide spectrum of topics reflecting recent breakthroughs, discoveries, and issues in the field of Biology. The topics serve as a basis for an in-depth study of the background of the subject, its scientific impact, current importance, and how it has or will affect society. Topics include emerging diseases, the effects of global warming on animal populations, and the Human Genome Project, as well as others. Students are expected to suggest and research topics for inclusion in the course.

## Honors Histology

Prerequisite: B in Biology.

Histology is the study of the microscopic structure of animal tissues. Specifically, this semester focuses on the characteristics of the different tissue types that form organ systems, how they are combined to form those systems, and how they work collectively to perform the functions of each system. This course presents the microscopic anatomy, which comprises of the structural basis of normal physiology. Such knowledge is essential for understanding disease mechanisms in terms of altered structure and function of the human body. Emphasis is placed on light and electron microscopic study of tissues in class and in the laboratory using personal computer imaging technology and direct light microscopic examination. This course is highly recommended for students with aspirations in the medical, health, and biological fields.

# SOCIAL STUDIES DEPARTMENT

## ADVANCED PLACEMENT ADMISSIONS CRITERIA

### ADVANCED PLACEMENT UNITED STATES HISTORY

### ADVANCED PLACEMENT EUROPEAN HISTORY

### ADVANCED PLACEMENT UNITED STATES GOVERNMENT

### ADVANCED PLACEMENT PSYCHOLOGY

PSAT EBRW score of 550

A- average in Honors Social Studies and English courses;

A in college prep Social Studies and English courses

Consultation with current Social Studies teacher and approval of Department Head

### ADVANCED PLACEMENT WORLD HISTORY: MODERN

Acceptance into the Honors Arts and Humanities Academy

# SOCIAL STUDIES DEPARTMENT CONT'

## REQUIRED CORE COURSE OFFERINGS

COURSE NUMBER	COURSE LEVEL	COURSE TITLE	COURSE CREDITS	GRADE LEVEL
60001	CP	Modern World Studies	5	9
60002	H	Honors Modern World Studies	5	9
60004	AP	Advanced Placement World History: Modern	5	9
61001	CP	United States History 1	5	10
61002	H	Honors United States History 1	5	10
62001	CP	United States History 2	5	11
62002	H	Honors United States History 2	5	11
62004	AP	Advanced Placement United States History	5	11

## ELECTIVE COURSE OFFERINGS

66002	H	Honors European History	5	12
66004	AP	Advanced Placement European History	5	12
69004	AP	Advanced Placement United States Government	5	11, 12
67004	AP	Advanced Placement Psychology	5	11, 12
63352	H	Honors Civics	2.5	9, 10
<b>NEW</b>	H	Honors Citizens and the Law	2.5	10, 11
64051	CP	Economics	2.5	11, 12
65151	CP	United States Constitutional Law	2.5	11, 12
63151	CP	American Women's History	2.5	11, 12
63251	CP	Sports and American Society	2.5	11, 12
67051	CP	Psychology	2.5	11, 12
67151	CP	Sociology	2.5	11, 12
68051	CP	World Genocide	2.5	11, 12
70051	CP	Principles of Business	2.5	10, 11, 12



# SOCIAL STUDIES COURSES

## Modern World Studies

This full-year program introduces students to the modern world through a comprehensive look at the religious, political, historical, and geographic issues which challenge our world today. Through an examination of the significant characteristics of past societies and historical movements, students develop an appreciation for the impact of ideologies, conflict, and globalization on the contemporary world. In addition to exploring the nature of world societies, this curriculum is designed to develop and strengthen critical reading, writing, research, and thinking skills. A major research project is part of the course requirements.

## Honors Modern World Studies

This full-year program introduces students to the modern world through a comprehensive look at the religious, political, historical, and geographic issues which challenge our world today. Through an examination of the significant characteristics of past societies and historical movements, students develop an appreciation for the impact of ideologies, conflict, and globalization on the contemporary world. In addition to exploring the nature of world societies, this curriculum is designed to develop and strengthen critical reading, writing, research, and thinking skills. Students strengthen analytical and critical thinking skills while gathering information from primary sources, the Internet and textbooks. A major research project is part of the course requirements.

## AP World History: Modern



In AP World History: Modern, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. This full-year course provides six themes that students explore throughout the course to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.

## United States History 1

US 1 is the first of a two-year thematic exploration of the history of the United States beginning with the era of exploration and colonial America and continuing through the emergence of the United States as an expanding industrial and world power. This course reinforces critical reading, writing, research, and thinking skills developed in grade 9. A major research project is part of the course requirements.

## Honors United States History 1



US 1 is the first of a two-year thematic exploration of the history of the United States beginning with the era of exploration and colonial America and continuing through the emergence of the United States as an expanding industrial and world power. This course reinforces critical reading, writing, research, and thinking skills developed in grade 9. This course offers a serious, diligent student the opportunity to pursue an intensive and extensive study of American history. A major research project is part of the course requirements.

## United States History 2

US 2 is the second of a two-year thematic exploration of the history of the United States beginning with World War I and continuing to the dawn of the 21st century and contemporary history. This course reinforces critical reading, writing, research, and thinking skills. A major research project is part of the course requirements.

## Honors United States History 2

US 2 is the second of a two-year thematic exploration of the history of the United States beginning with World War I and continuing to the dawn of the 21st century and contemporary history. This course reinforces critical reading, writing, research, and thinking skills. This course requires a strong commitment by the individual student to stay abreast of the scope and sequence of the course curriculum. A major research project is part of the course requirements.

## Advanced Placement United States History



A summer assignment is required.

This full-year course prepares students to take the AP exam in U.S. History. It includes an in-depth analysis of foreign and domestic affairs from the Gilded Age to the present. It emphasizes critical reading and interpretation of historical documents and understanding of alternative interpretations of historical topics by leading historians and of changing historical interpretations throughout history. This course requires well-developed writing skills, as demonstrated by the composition of analytical essays, document-based essays, and short research assignments.

At the conclusion of the course, all students will take the APUSH Exam for which there is an additional fee.

# SOCIAL STUDIES COURSES CONT'

## Honors European History

This full-year study of European History since 1450 introduces students to the cultural, economic, political, and social developments that played a fundamental role in shaping the world in which we live. Students develop a contextual comprehension of contemporary institutions, the role of continuity and change in the present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. The student develops an understanding of the political themes in modern European history and an ability to analyze historical evidence and historical interpretation through various writing assignments including document-based questions. A major research project is part of the course requirements.

## Advanced Placement European History

This full-year study of European History since 1450 introduces students to the cultural, economic, political, and social developments that played a fundamental role in shaping the world in which we live. The students develop a contextual comprehension of contemporary institutions, the role of continuity and change in the present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. The student develops an understanding of some of the political themes in modern European history, an ability to analyze historical evidence and historical interpretation, and an ability to express historical understanding in written format.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.

## AP US Government



This full-year course gives students an analytical perspective on government and politics in the United States. It includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Students will be able to critically analyze relevant theories and concepts, apply them appropriately and develop their connections across the curriculum. Students will also be able to analyze and interpret basic data relevant to U.S. government and politics including data presented in charts, tables, and other formats.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.

## Advanced Placement Psychology



The Advanced Placement Psychology course is a full-year survey course with numerous units of introductory psychology on the college level. Topics for the class include the history of psychology, research and statistics, neuropsychology, sensation and perception, cognitive, behavioral, clinical, and social psychology. A large focus of the class is directed at the scientific understanding of human behavior especially as it relates to the latest findings in brain research.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.

## Honors Civics



This semester course is designed to prepare students to become well-informed, active citizens in the community, state, and nation. Students will learn how power and responsibility are shared and limited by the government, the place of law in the American constitutional system, the rights the American government guarantees its citizens, and the impact American politics has on world affairs. Students will also examine how the world is organized politically and how civic participation in the American political system compares to that in other societies around the world today.

## Honors Citizens & the Law

Our system of government emphasizes the importance of the rights and responsibilities of individuals in our society. This semester course explains how the law works for the protection of the individual and for the protection of society from those who break the law. Topics explored include civil liberties, trial procedures, jury selection, crime, punishment, and the death penalty.

Students will be expected to continually improve their social studies skills and stay abreast of current events on the topics covered in class. The class involves higher-level thinking and analysis of primary documents and sources.



# SOCIAL STUDIES COURSES CONT'

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## Economics

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This semester course introduces students to the basic principles of the free enterprise system so they will be better able to function as consumers, workers, and citizens. Areas of study include economic theory, economic systems, money and banking, business organization, monetary and fiscal policy, supply and demand, and the role of government. Students gain an understanding and appreciation of the importance of living in an economic system that protects individual freedoms.

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## United States Constitutional Law

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This semester course will introduce students to the United States legal system with special emphasis on the Supreme Court and arrest, trial, and appeal procedures. The course will begin with a brief overview of the three branches of government and the American court system. The students will then study and analyze important Supreme Court cases. The students will also participate in a mock trial and/or Supreme Court review of a controversial Constitutional question.

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## Psychology

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This one-semester course provides the opportunity to study individual and social psychology and how the knowledge and methods of psychologists are applied to the solutions of human problems. One of the goals is to broaden the students' range of understanding with respect to their actions and the actions of others. The course develops critical thinking and writing skills through an emphasis on ethics in scientific research. A major research project is one of the requirements.

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## Sociology

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Sociology is the study of society and human behavior. It focuses on the systematic study of social behavior, social institutions, and social change. Emphasis is placed on the interaction between individuals and culture. Areas of study in this semester course include family, religion, community organizations, political and social groups and leisure time organizations. Moral values, traditions, folkways, the mobility of people and other factors in society that influence group behavior are also included. A major research project is one of the requirements.

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## World Genocide

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In this semester course, students will examine racism, anti-Semitism, and ethnic conflict. Emphasis will be given to the Armenian genocide, the Holocaust, and recent conflicts and genocides in Africa, Asia, the Middle East, and the Balkans. The class will also analyze the role individuals and the international community played in these conflicts.

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## American Women's History

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This semester course will examine women's lives in American history, placing them at the center of our interpretation. The class will explore women's contributions and achievements, as well as the barriers women faced, in American society from colonial times to the present. The students will consider social, political, cultural, and economic histories of women in the United States. Women's history reveals larger themes in US history, and the class will examine the ties between the two. The course seeks to answer the following questions: How did women's lives vary throughout different eras in history? How did women shape their lives? How is history different when viewed from a woman's perspective? What is the value of women's history?

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## Sports and American Society

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The students in this semester course will examine the role that sports have played in American society. Students will look at how sports have impacted American culture and how sports were perceived during different time periods in American history. Topics covered will include how sports interact with the American educational, political, and economic systems. The students will also examine how sports helped develop equality among the races and genders.

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## Principles of Business

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This semester course is designed to introduce students to the world of business. Topics presented will include marketing, finance, management, and business ethics. The course will provide students with a basic understanding of the history of business in the United States and an understanding of the current global perspective on business. The course will teach students the skills and knowledge needed to be successful in business. Possible requirements will be participation in a Stock Market Simulation game and inventing a new product, designing the concept and a business marketing plan.



# COMPUTER SCIENCE DEPARTMENT

## ADVANCED PLACEMENT ADMISSIONS CRITERIA

### ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES

PSAT EBRW and Math scores of 500 or better

Students are expected to be familiar with standard computer operations (e.g., login, cut & paste, email attachments, etc.) before enrolling in the course.

### ADVANCED PLACEMENT COMPUTER SCIENCE A

PSAT EBRW and Math scores of 550 or better

Successful completion of an Introductory Programming Course (Python or Java)

Students are expected to be familiar with standard computer operations

## COURSE OFFERINGS

COURSE NUMBER	COURSE LEVEL	COURSE TITLE	COURSE CREDITS	GRADE LEVEL
77004	AP	Advanced Placement Computer Science Principles	5	10, 11, 12
79004	AP	Advanced Placement Computer Science A	5	11, 12
75951	CP	Introduction to Computer Programming (Python)	2.5	10, 11, 12
75851	H	Honors Java Programming	2.5	10, 11, 12
77052	H	Honors Mobile App Development	2.5	10, 11, 12
77051	CP	Web Design	2.5	10, 11, 12
79002	H	Honors Interactive Design with UE4	2.5	10, 11, 12
72051	CP	Introduction to Raspberry Pi*	2.5	10, 11, 12
79052	H	Honors Cybersecurity	2.5	11, 12

\*INTRODUCTION TO RASPBERRY PI HAS ENGINEERING COMPONENTS

# COMPUTER SCIENCE COURSES

### AP Computer Science Principles



Computer Science Principles (CSP) offers a multidisciplinary approach to teaching the underlying principles of computation. The full-year course will introduce students to creative aspects of programming, using abstractions and algorithms, working with large data sets, understandings of the Internet and issues of cybersecurity, and impacts of computing that affect different populations. CSP will give students the opportunity to use current technologies to solve problems and create meaningful computational artifacts. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.

### AP Computer Science A

Computer Science embraces problem-solving, hardware, algorithms, and perspectives that help people utilize computers to address real-world problems in contemporary life. The AP Computer Science A full-year course introduces students to computer science with fundamental topics that include problem-solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.

# COMPUTER SCIENCE COURSES CONT'

## Intro to Computer Programming (Python)



Students are introduced to computer programming using the Python programming language. Python is a general-purpose programming language that can be used on any modern computer operating system. It can be used for processing text, numbers, images, scientific data, etc. Python handles a lot of complexity, so it is beginner-friendly in that it allows students to focus on learning programming concepts. The basics of Python serve to create a solid foundation for the student's programming career ahead of C-based languages, also referenced in this semester course.

Students are expected to be familiar with standard computer operations (e.g., login, cut & paste, email attachments, etc.) before enrolling in the course.

## Honors Java Prog



In this semester course, students are introduced to computer programming using the Java programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, using object-oriented tools, Java exception handling, file input/output, threads, collection classes, and networking.

Students are expected to be familiar with standard computer operations (e.g., login, cut & paste, email attachments, etc.) before enrolling in the course.

## Honors Mobile App Development



Beginning with the basics of design, this semester course progresses through the process of creating quality professional-level Android applications. Students will be exposed to the block modeling of App Inventor and the scripting language of JavaScript. App Development is a programming-intensive course designed for the serious programmer.

## Web Design

Web Design is an introduction to the design, creation, and maintenance of web pages and websites. Students learn how to critically evaluate website quality, learn how to create and maintain quality web pages, learn about web design standards and why they're important, and learn to create and manipulate images. This semester course progresses from introductory work on web design to a culminating project in which students design and develop websites for local community organizations.

Students are expected to be familiar with standard computer operations (e.g., login, cut & paste, email attachments, etc.) before enrolling in the course.

## Honors Interactive Design with UE4



Unreal Engine 4 is a complete suite of development tools made for anyone working with real-time technology. From enterprise applications and cinematic experiences to high-quality games across PC, console, mobile, VR and AR, Unreal Engine 4 gives students everything they need to create robust interactive experiences.

A world-class toolset and accessible workflows empower developers to quickly iterate on ideas and see immediate results without touching a line of code. For over two decades, Unreal Engine's multiplayer framework has produced some of the industry's most compelling multiplayer experiences. But UE4 is far more than games. Designed by film and TV professionals, Sequencer unlocks your creative potential with a fully nonlinear, real-time cinematic editing and animation tool built for collaboration. Successful students will develop strategies to enable and direct their learning as they face challenges that increase in difficulty throughout the course. Students should have a well-functioning and well-maintained computer before considering this semester course.

## Intro to Raspberry Pi

A mainstay in the world of makers and electronics, The Raspberry Pi® is a single-board, low-cost, high-performance computer. Not only has it helped bring the joy of electronics and computer programming to people around the world, but it has also become a staple of the maker community. Students enrolling in this semester course should have a genuine interest in programming and project-based learning.

## Honors Cybersecurity

Prerequisite: Successful completion of Intro to Computer Programming or Java Programming.

Students will develop a way of thinking that is security-oriented, provides a better understanding of how to think about adversaries, and how to build systems that defend against them. This semester course covers the fundamental concepts from the hardware to the software to the human-computer interface, with the use of cryptography to secure interactions. These concepts are illustrated with examples drawn from modern practice and augmented with hands-on exercises involving relevant tools and techniques.

# ENGINEERING DEPARTMENT

## COURSE OFFERINGS

COURSE NUMBER	COURSE LEVEL	COURSE TITLE	COURSE CREDITS	GRADE LEVEL
71102	H	Honors Engineering 1: Applications	5	11, 12
71202	H	Honors Engineering 2: Mechatronics	5	11, 12
<b>NEW</b>	H	Honors Entrepreneurial Engineering	5	11, 12
<b>NEW</b>	H	Honors Engineering Capstone	5	12
71451	CP	Introduction to Engineering Design	2.5	10, 11, 12
71452	H	Honors Introduction to Engineering Design	2.5	10, 11, 12
77251	CP	Design for 3D Printing	2.5	10, 11, 12

In addition to the general requirements found on Page 8, please note the criteria listed for each course.

## ENGINEERING COURSES

### Honors Engineering 1: Applications



Prerequisite: Successful completion of Intro to Engineering Design. Building on skills developed in the prerequisite Introduction to Engineering Design course, students further develop skills in structural, mechanical, and electrical engineering through hands-on projects that also involve simulation software and computer-assisted design in this year-long course.

During the fourth quarter, students apply the discipline-specific knowledge gained in the first three quarters. Each student is mentored by a science, math, technology, or engineering instructor who serves as a professional resource to guide the student through an applied engineering project designed to solve a real-world issue. This course satisfies the third-year Science requirement.

### Honors Engineering 2: Mechatronics



Prerequisite: Successful completion of Intro to Engineering Design. Mechatronics, as an engineering discipline, is the synergistic combination of mechanical engineering, electronics, control engineering, and computers – all integrated through the design process. Students in this year-long course are involved in the complex decision-making of the operation of physical systems. Mechatronic systems depend on computer software for their unique functionality, and as such, a heavy emphasis is placed on the programming of microprocessors and micro-controllers. Students in this course study mechatronics at both a theoretical and practical level, balancing theory/analysis and hardware implementation. As an applied science, the emphasis is placed on physical understanding rather than on mathematical formalities. This course satisfies the third-year Science requirement.

### Honors Entrepreneurial Engineering



This course is by invitation only. A B+ or better in either Honors Engineering or Honors Introduction to Computer Programming is required.

This year-long course is a combination of Presentation Strategies for Entrepreneurs, Startup Operations for Entrepreneurs, and Honors Engineering/Programming. It is taught at a rigorous college-level pace. Students will take an innovative idea, turn it into a business plan, and bring it to market. High-level business concepts including balance sheets, profit and loss statements, and cash flow combine with Human Resources and employment laws in this dynamic course in which students will be given an opportunity to pitch their product for a chance to receive \$10K in services and a scholarship to a 10-week summer course at Felician College.

### Hns Eng. Capstone



Prerequisite: B+ or better in both Honors Engineering 1 and 2. Capstone courses provide students with an opportunity to apply concepts and tools studied in the engineering program to the solution of a “real-world” problem. The capstone course requires students to integrate knowledge gained from previous courses, including project management, business, and engineering disciplines, as well as the practical experience that they may have gained. The objective is not to develop complex engineering products or services, but rather to introduce and understand the multidimensional processes by which a design is selected, guided, and controlled. This year-long course satisfies the third-year Science requirement.

# ENGINEERING COURSES CONT'

## Honors Introduction to Engineering Design



Grade 9 Honors Prerequisite: Concurrent enrollment in Honors Algebra 1, Geometry, or Honors Geometry

The major focus of the IED semester course is to expose students to the engineering design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. IED allows students to develop skills and understanding of course concepts through activity-, project-, and problem-based learning and challenges students to continually hone their interpersonal skills, creative abilities, and understanding of the design process. The course assumes no previous knowledge of engineering, but students should be concurrently enrolled in college preparatory mathematics and science. The successful IED students will develop strategies to enable and direct their learning as they face challenges that increase in difficulty throughout the course. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.

## Design for 3D Printing NOT OFFERED IN 2021-2022

Students will learn how to use Autodesk Fusion 360 to design ten practical and functional products that can be 3D printed. Each lesson builds on the prior one to introduce design concepts and best practices when designing for desktop 3D printers. Fusion 360, a powerful design tool, is free for students and hobbyists. Students should have a well-functioning and well-maintained computer before considering this course.

Successful students will develop strategies to enable and direct their learning as they face challenges that increase in difficulty throughout this semester course. In addition to design, students will learn to service and maintain our seven 3D printers. These printers will inherently need routine calibration, maintenance of the build plates and extruders, alignment of the axis bars, and general teardown and re-build to avoid long-term outages.

## FINE AND PERFORMING ARTS DEPT. ART

### ADVANCED PLACEMENT ADMISSIONS CRITERIA

#### ADVANCED PLACEMENT ART HISTORY

PSAT EBRW score of 550 or better

Consultation with and approval of Department Head

#### ADVANCED PLACEMENT STUDIO ART

Consultation with and approval of Department Head

### COURSE OFFERINGS

COURSE NUMBER	COURSE LEVEL	COURSE TITLE	COURSE CREDITS	GRADE LEVEL
88004	AP	Advanced Placement Art History	5	11, 12
80504	AP	Advanced Placement Studio Art	5	11, 12
81451	CP	Photoshop Essentials	5	12
<b>NEW</b>	H	Honors Photoshop	5	12
<b>NEW</b>	H	Honors Design and Composition	5	10
80001	CP	Portfolio	5	10, 11, 12
80002	H	Honors Portfolio	5	11, 12

# FINE AND PERFORMING ARTS DEPT. CONT'

## COURSE OFFERINGS

COURSE NUMBER	COURSE LEVEL	COURSE TITLE	COURSE CREDITS	GRADE LEVEL
80051	CP	Visual Arts 9	1.25	9
80951	CP	Art Essentials	2.5	10, 11
<b>NEW</b>	H	Honors Art Essentials	2.5	9, 10
80351	CP	Painting	2.5	10, 11, 12
80451	CP	Mixed Media	2.5	10, 11, 12
80551	CP	Graphic Design	2.5	10, 11, 12

In addition to the general requirements found on Page 8, please note the criteria listed for each course. All Honors and AP courses require the permission of the Department Head.

## ART COURSES

### Advanced Placement Art History



Required: A grade of A- or better in Art Essentials, The Advanced Placement Art History year-long course is equivalent to a two-semester introductory college course that explores topics such as the nature of art, art-making, and responses to art. By investigating artistic traditions from a global perspective, students become active participants in the global art world, engaging with its forms and content, as they experience, research, discuss, read, and write about art, artists, art-making, and responses to and interpretations of art.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.

### Advanced Placement Studio Art



Required: Completion of Honors Portfolio with a grade of A- or better, portfolio presentation and review (minimum of six pieces in various media).

The Advanced Placement program in Studio Art enables highly motivated students to do college-level work in studio art while still in high school. Candidates must submit a portfolio of work for evaluation at the end of the school year. They may receive college credit for the year-long course in addition to high school credit. Students may select one of two portfolio programs: Drawing or 2-Dimensional.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.

### Photoshop Essentials

Required: Art Essentials

Students MUST have a working school tablet. This year-long course is designed to give students an understanding of how to apply Adobe Photoshop to perform various image-processing and enhancing techniques. Photoshop Essentials offers students the opportunity to produce various projects through which they will learn how to move, size and duplicate images. Additional skills include learning how to use layers, layer effects, filters, painting and blending, color modification, and creating images of different formats for different applications.

### Honors Photoshop NOT OFFERED IN 2021-2022



Required: Honors Art Essentials

Students MUST have a working school tablet. This year-long class is designed to introduce students to Photoshop, an image editing software used by photographers, graphic designers, video game artists, etc. Working with a variety of basic features, tools and manipulation techniques, Honors Photoshop students will be able to create their own unique, original images. The course provide and in-depth exploration of the many creative opportunities that exist utilizing knowledge and/or expertise in Photoshop.



# ART COURSES CONT'

## Hns Design and Comp NOT OFFERED IN 2021-2022

(Grade 10 Arts & Literature Academy, Grade 11 by Invitation Only)  
Designed for the aspiring artist, this year-long course offers students the opportunity to master the techniques of various media while exploring realistic, stylized, abstract, and nonrepresentational design. The program includes demonstrations and practice in portraiture, the human form, advanced topics in perspective, series creation, etc. Working from life and/or the imagination is stressed. Areas of study include art history, aesthetics, how art affects our environment, art criticism, and evaluating works of art for effectiveness.

## Portfolio



Required: Recommendation from the Department Head.  
Designed for the aspiring artist, Portfolio is a year-long course that offers students the opportunity to master the techniques of various media while exploring realistic, stylized, abstract and nonrepresentational design. The program includes demonstrations and practice in portraiture, the human form, advanced topics in perspective, series creation, etc. Working from life and/or the imagination is stressed. Areas of study include art history, aesthetics, how art affects our environment, art criticism, and evaluating works of art for effectiveness.

## Honors Portfolio



Required: Grade A- or better in Portfolio.  
Designed for artists who have already demonstrated proficiency in using the elements and principles of design effectively in the creation of art, this semester course provides students with the opportunity to explore advanced styles and techniques as they build a solid portfolio for presentation to prospective colleges. Honors Portfolio also provides a firm foundation for those intending to enroll in Advanced Placement Studio. One, two and three-dimensional work are included in a flexible curriculum that allows for personal artistic development.

## Visual Arts 9

Required Freshman Course  
Freshman art seminar allows the student to examine creativity through an exploration of the media and processes that are used by artists to express ideas, beliefs, and emotions.

## Art Essentials

Students explore the elements and principles of good design while learning basic skills in various media in this semester course. Drawing, painting, and 3-dimensional work are the focus of the program. Basic perceptual and organizational skills are stressed as students become attuned to their unique aesthetic awareness and creative self-expression. The media involved include pen and ink, graphite, charcoal, pastels, acrylics, watercolors, etc. Areas of study include composition, aesthetics and art criticism.

## Honors Art Essentials



(Grade 9 Arts & Literature Academy, Grade 10 by Invitation Only)  
Students explore the elements and principles of good design as related to the works of artists throughout history, as well as learning basic skills in various media. IN this semester course, drawing and painting are the focus of the program. Basic perceptual and organizational skills are stressed as students become attuned to their unique aesthetic awareness and creative self-expression. The media involved include pen and ink, graphite, charcoal, pastels, acrylics, watercolors, etc. Areas of study include composition, aesthetics and art criticism.

## Mixed Media



Required: Art Essentials  
The Mixed Media semester course allows the student to create one, two-, and three-dimensional works of art while exploring the juxtaposition and interaction of various types of media, such as charcoal, acrylic paint, marker, etc. Techniques such as printmaking, positive and negative assembly, and found-object construction enhance the program. Areas of study include exploration of historical works, effects of art on personal environments, and criticism/analysis.

## Graphic Design

Required: Art Essentials  
An introduction to digital imaging and design, the semester course, Graphic Design, introduces the structure and terms of the various type of digital imagery used in creative problem solving and communication. Students will use their knowledge of the elements and principles of design learned in Art Essentials, as well as composition, to use text, images, and color to express a message. Programs used include Adobe Photoshop and Illustrator.

## Painting

Required: Art Essentials  
Painting is a beginning level semester course which offers the student the opportunity to experience various paint media and the techniques appropriate to their application. Acrylic, watercolor, wax-resist and gouache will be examined through teacher demonstration and student reinforcement, in addition to explorations of artists and their work. Areas of study such as color theory, value, composition and content provide the foundation for the program.



# FINE AND PERFORMING ARTS DEPT.

## MUSIC AND DANCE

### ADVANCED PLACEMENT ADMISSIONS CRITERIA

#### ADVANCED PLACEMENT MUSIC THEORY

PSAT EBRW score of 550 or better

Approval of Department Head

### COURSE OFFERINGS

COURSE NUMBER	COURSE LEVEL	COURSE TITLE	COURSE CREDITS	GRADE LEVEL
82204	AP	Advanced Placement Music Theory	5	11, 12
86101-301	CP	DePaul Voices 1, 2, 3	5	10, 11, 12
89051	CP	Music Seminar	2.5	10, 11, 12
<b>NEW</b>	H	Honors Music Seminar	2.5	9
89351	CP	Music Production	2.5	10, 11, 12
87151	CP	Piano 1	2.5	10, 11, 12
87351	CP	Piano 2	2.5	10, 11, 12
87552	H	Honors Piano 3	2.5	11, 12
86441	CP	Music Appreciation - Theory	2.5	9
86541	CP	Music Appreciation - Voice	2.5	9
89901	CP	Introduction to Ballet	2.5	10, 11, 12

## MUSIC AND DANCE COURSES

#### Advanced Placement Music Theory



The year-long AP Music Theory course covers the material from the first two semesters of college-level music theory courses, including topics such as advanced musicianship, harmonic, melodic, and rhythmic analysis, and dictation, and composition. Students additionally develop the ability to recognize, understand, and describe advanced materials and processes of music that are heard or presented in a score. Development of aural skills is a primary objective. Students understand basic concepts and terminology by listening to and performing a wide variety of music.

At the conclusion of the course, all students will take the Advanced Placement Exam for which there is an additional fee.

#### DePaul Voices 1, 2, 3

Required: Students must be comfortable singing publicly and be willing to perform in front of audiences, both large and small. DePaul Voices: Think "Pitch Perfect." This group performs a cappella arrangements of pop music, which is accompanied by vocal percussion (beatboxing). There are many opportunities for solos and opportunities to compete at national a cappella festivals – just like "Pitch Perfect." If you like to sing, speak with the music teacher about enrolling in this year-long course.



# MUSIC AND DANCE COURSES CONT'

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## Music Seminar

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Required: Students must have prior vocal or instrumental experience and must audition. Recommendation of the music teacher and department chairperson is also required.

Music Seminar is a year-long course that provides the opportunity for students to improve their skills either as a singer or as an instrumentalist. Students should feel comfortable practicing independently as well as performing in small or large ensembles. Individual learners will be allowed to select and learn music that interests them personally, whether it be pop, jazz, musical theater or classical and are encouraged to compose their own music.

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## Honors Music Seminar NOT OFFERED IN 2021-2022

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Music Seminar is a year-long course that provides the opportunity for students to improve their skills either as singers or as instrumentalists. Students should feel comfortable practicing independently as well as performing in small or large ensembles. Individual learners will be allowed to select and learn music that interests them personally, whether it be pop, jazz, musical theater, or classical, and are encouraged to compose their own music.

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## Music Production

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Required: Grade A- or better in Music Appreciation

Students will learn to create their own music through the mastery of the four stages of professional music production: recording, editing, mixing, and mastering. Using programs similar to GarageBand, students will learn techniques used by professional musicians to produce music for movies, video games, and songs written by the best artists of our generation. Students wishing to enroll in this semester course should be comfortable working with new technology and have a basic knowledge of music theory (the manipulation of music through the elements of beat, melody, harmony, and color).

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## Piano 1

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Piano 1 is paced for the motivated student with no prior keyboard skills to learn to play. The semester course emphasizes reading and keyboard theory. Most people will be able to meet the class requirements with practice during the class hour; however, students are encouraged to practice additionally outside of class. More experienced students may supplement class assignments with additional repertoire. Students with advanced piano training should audition for Piano 2.

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## Piano 2

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Prerequisites: A grade of B+ or better in Piano 1 and the recommendation of the music teacher.

A continuation of skills acquired in Piano 1 class, this semester course provides the opportunity for further mastery of the keyboard through increased technical ability. Students are expected to include practice time outside of the classroom as the course becomes more advanced.

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## Honors Piano 3

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Prerequisites: A grade of B+ or better in Piano 2 and the recommendation of the music teacher.

A continuation and further development of skills acquired in Piano 2 class, this semester course provides the opportunity to pursue a mastery of the keyboard through increased technical aptitude, as well as assistance in establishing a fuller repertoire and stronger performance ability.

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## Music Appreciation - Theory

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Music Appreciation is a required Freshman course.

Throughout our daily lives, we are bombarded with musical messages through TV, the Internet, radio, and various other media. In this course, students will become more aware of the music in their lives. The course will help students become more familiar with music in their lives as it relates to cultural experiences..

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## Music Appreciation - Voice

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Music Appreciation is a required Freshman course.

Designed for those who wish to experience vocal performance, this course provides students the opportunity to sing with a group, either exploring or enhancing their singing skills. Learners will also become more familiar with music in their lives as it relates to cultural experiences.

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## introduction to Ballet NOT OFFERED IN 2021-2022

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Come enjoy the beauty and grace of classical ballet. This semester course will cover basic ballet positions, steps and vocabulary with a focus on the student's awareness of proper posture and body alignment. Standing barre work and center floor exercises will be given to enhance coordination, strength, balance and flexibility. Participants will also develop a sense of musical awareness and movement quality. No prior ballet experience necessary.

# PHYSICAL EDUCATION & HEALTH DEPT.

Physical Education is required yearly of all high school students. The program is planned with the triple purpose of providing an opportunity for the development of a healthy well-adjusted person, an interest in physical activity, and a tolerance of others. A variety of activities is offered, designed to meet the needs and abilities of each grade level, and changing with each marking period and season.

## REQUIRED COURSE OFFERINGS

COURSE NUMBER	COURSE LEVEL	COURSE TITLE	COURSE CREDITS	GRADE LEVEL
91141	CP	Health 1	1.25	9
9241	CP	Driver Education	1.25	10
9341	CP	Health 3: First Aid	1.25	11
9441	CP	Health 4: Family Living	1.25	12
91001	CP	Physical Education 1/2	2.5-3.75	9, 10
93001	CP	Physical Education 3/4	2.5-3.75	11, 12

## HEALTH COURSES

### Health 1

This course is designed to heighten students' awareness regarding such personal health issues as physical fitness, sleep and fatigue, nutrition, care of skin, hair and nails, and healthy personality traits. Also, current information concerning the use of tobacco, alcohol and illegal drugs, along with eating disorders, AIDS and reproductive systems is thoroughly discussed. Finally, career opportunities within the Health field, as well as bystander care guidelines, are shared with the students.

### Driver Education

The theory portion of Driver Education is compulsory for all sophomores. The course consists of more than 30 hours (the state-required minimum) of lecture and audio-visual aids, dealing with the fundamentals of driving. There is also a thorough examination of the New Jersey Driver Manual, culminating with the administration of the New Jersey State written examination.

### Health 3: First Aid

This course is designed to teach students First Aid, Personal Safety and AIDS Awareness, as presented by the American National Red Cross. Emergency procedures such as C.P.R., obstructed airways, artificial respiration, bandaging, and transport and carry are covered with the use of choking and CPR mannequins. A portion of the course is also devoted to career opportunities in sports medicine, athletic training, paramedic training, nursing, and other health-related fields.

### Health 4: First Aid

This course provides students with the information and skills they need to function well within their current family structure while preparing them to develop their own strong families in the future. This course emphasizes building interpersonal relationships through a range of topics -- families and society, balancing work and family life, conflict resolution, financial problems, death, family violence, substance abuse, building a strong marriage, and many more. Students look at key issues related to juggling home and career using critical thinking questions and real-life problems to solve while comparing their ideas with others their age.

Physical Education Activities include Flag football, Basketball, Pickleball, Soccer, Volleyball, Softball, Weight Training, Box Ball, Team Handball, Recreational games, Ultimate Frisbee, Frisbee Golf, Aerobic Exercise, and Bocce Ball.

