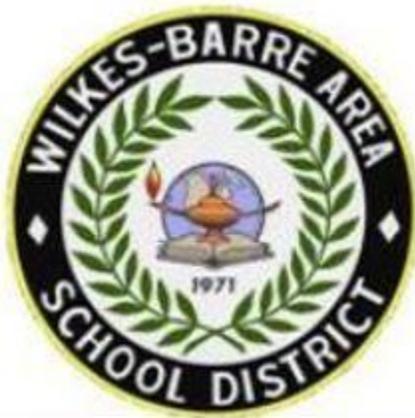


---

---

# **WILKES-BARRE AREA SCHOOL DISTRICT**



## **Program of Studies**

---

---

## Table of Contents

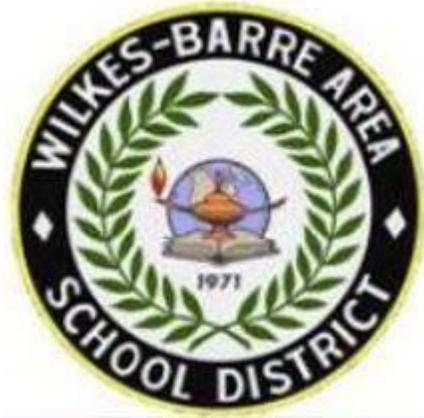
<b>ENGLISH</b> .....	8
7 <sup>th</sup> Grade English .....	8
7 <sup>th</sup> Grade Gifted English .....	8
7 <sup>th</sup> Grade Reading .....	8
8 <sup>th</sup> Grade English .....	8
8 <sup>th</sup> Grade Gifted English .....	9
8 <sup>th</sup> Grade Reading .....	9
9 <sup>th</sup> Grade English .....	9
9 <sup>th</sup> Grade Advanced English .....	9
9 <sup>th</sup> Grade Gifted English .....	9
10 <sup>th</sup> Grade English .....	10
10 <sup>th</sup> Grade Advanced English .....	10
11 <sup>th</sup> Grade English .....	11
11 <sup>th</sup> Grade Advanced English .....	11
12 <sup>th</sup> Grade English .....	11
12 <sup>th</sup> Grade Advanced English .....	12
Project Study 10 .....	12
Project Study 11 .....	12
Project Study 12 .....	13
SAT Prep-English .....	13
Journalism .....	13
Public Speaking .....	13
Public Speaking I .....	13
Research Seminar .....	14
Advanced Placement English 12 .....	14
Literature Keystone Acceleration .....	15
Cultural Perspectives through Children’s Literature .....	15
Literature in Film .....	15
Creative Writing .....	16
<b>FOREIGN LANGUAGE</b> .....	19
Spanish I .....	19
French I .....	19
German I .....	19

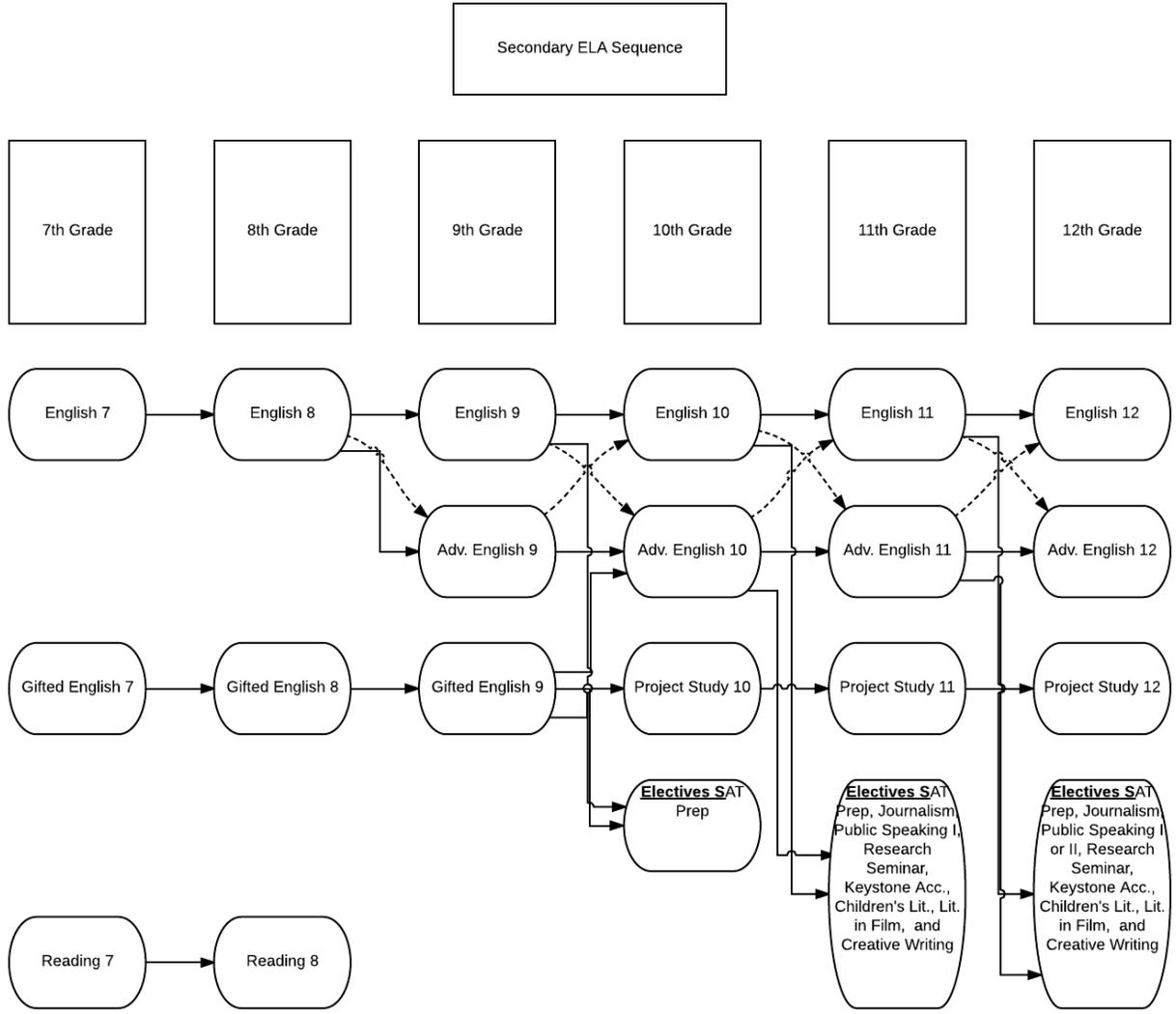
French 2.....	19
German 2.....	19
Spanish 2.....	20
French 3.....	20
German 3.....	20
Spanish 3.....	20
French 4.....	20
German 4.....	20
Spanish 4.....	21
Spanish I for Native Speakers .....	21
Spanish II for Native Speakers .....	21
<b>SOCIAL STUDIES .....</b>	<b>24</b>
7th Grade Social Studies – World Cultures .....	24
8th Grade Social Studies- Western Civilization.....	24
United States History I .....	24
United States History II .....	25
Advanced Placement (AP) United States History .....	25
Civics/Economics .....	25
Introduction to Psychology .....	26
AP Psychology .....	26
Introduction to Political Science .....	26
Social Science Seminar .....	27
Law in America .....	27
Media Studies .....	27
Art in History.....	27
Modern US History .....	28
Sociology .....	28
Holocaust History.....	28
<b>MATHEMATICS.....</b>	<b>31</b>
7 <sup>th</sup> Grade Advanced Pre-Algebra.....	31
7 <sup>th</sup> Grade Pre-Algebra A .....	31
8 <sup>th</sup> Grade Advanced Algebra I.....	31
8 <sup>th</sup> Grade Pre-Algebra B .....	32
Algebra I .....	32
Algebra II .....	32
9 <sup>th</sup> Grade Advanced Algebra II.....	32

<b>9th Grade Concepts of Algebra</b> .....	<b>33</b>
<b>Geometry</b> .....	<b>33</b>
<b>Advanced Geometry</b> .....	<b>33</b>
<b>Trigonometry Pre-Calculus</b> .....	<b>34</b>
<b>Calculus</b> .....	<b>34</b>
<b>Advanced Placement Calculus</b> .....	<b>34</b>
<b>Consumer Applications</b> .....	<b>34</b>
<b>College Ready Math</b> .....	<b>35</b>
<b>Probability and Statistics</b> .....	<b>35</b>
<b>SAT Prep</b> .....	<b>35</b>
<b>Keystone Acceleration</b> .....	<b>36</b>
<b>Keystone Acceleration Part II</b> .....	<b>36</b>
<b>Computer Programming I</b> .....	<b>36</b>
<b>Computer Programming II</b> .....	<b>36</b>
<b>Computer Programming III (Non AP CS)</b> .....	<b>37</b>
<b>11<sup>th</sup> or 12<sup>th</sup> Grade AP Computer Science A</b> .....	<b>37</b>
<b>Science</b> .....	<b>40</b>
<b>Science 7</b> .....	<b>40</b>
<b>Advanced Science 7</b> .....	<b>40</b>
<b>Science 8</b> .....	<b>40</b>
<b>Advanced Science 8</b> .....	<b>41</b>
<b>Environmental Science</b> .....	<b>41</b>
<b>Biology 1, Advanced</b> .....	<b>41</b>
<b>Biology 1</b> .....	<b>42</b>
<b>Chemistry 1, Advanced</b> .....	<b>42</b>
<b>Anatomy and Physiology</b> .....	<b>42</b>
<b>Earth and Space Science</b> .....	<b>42</b>
<b>Physics 1, Advanced</b> .....	<b>43</b>
<b>Biology 2, Advanced</b> .....	<b>43</b>
<b>Chemistry 2, Advanced</b> .....	<b>43</b>
<b>Science 3, Advanced Studies</b> .....	<b>44</b>
<b>Advanced Placement (AP) Physics</b> .....	<b>44</b>
<b>Advanced Placement (AP) Chemistry</b> .....	<b>44</b>
<b>Advanced Placement (AP) Biology</b> .....	<b>44</b>
<b>Introduction to Computer Applications</b> .....	<b>47</b>
<b>Advanced Software Applications for Business and Industry</b> .....	<b>47</b>

Accounting I.....	47
Accounting II.....	47
Advanced Business Applications Skills .....	48
Innovation & Society .....	48
Pathway to Success .....	50
Pathway to Success Part I .....	50
7 <sup>th</sup> Grade Computer Fundamentals .....	50
8 <sup>th</sup> Grade Introduction to Computer Science.....	50
Career Readiness .....	51
Transition Planning .....	51
<b>MUSIC.....</b>	<b>53</b>
General Music 7 & 8.....	53
Instrumental Music 7 .....	53
Instrumental Music 8 .....	53
Instrumental Music 9 .....	53
Orchestra Performance.....	53
Chorus Performance .....	53
Band Performance.....	53
Instrumental Music 10 .....	54
Instrumental Music 11 .....	54
Instrumental Music 12 .....	54
Chorus Performance .....	54
Band Performance.....	54
Orchestra Performance.....	54
<b>PHYSICAL EDUCATION .....</b>	<b>56</b>
7 <sup>th</sup> Grade General Physical Education .....	56
8 <sup>th</sup> Grade General Physical Education .....	56
9 <sup>th</sup> Grade General Physical Education .....	56
10 <sup>th</sup> -12 <sup>th</sup> Grade General Physical Education .....	56
9 <sup>th</sup> -12 <sup>th</sup> Grade Adaptive Physical Education .....	56
8 <sup>th</sup> Grade Health Education / Nutrition / Wellness .....	56
9 <sup>th</sup> Grade Health Education / Nutrition / Wellness.....	56
Intro to Wellness / PE Fitness Emphasis.....	57
Wellness .....	57

# ENGLISH DEPARTMENT





## ENGLISH

### 7<sup>th</sup> Grade English

#### 0710

**Seventh grade English forms a solid foundation for the Secondary English Integrated Language Arts Program. Integrated Language Arts provides holistic instruction in reading, writing, listening, speaking, and research skills. Understanding fiction and nonfiction, components within/between texts, literary devices, and organizational concepts within texts assist in both understanding literature and developing reading skills. Students focus on various types of literature such as short story, novel, poetry and nonfiction.**

**Students learn the five domains of effective writing by producing works in the expository/informative, persuasive, and narrative modes. Students also begin the process of research, while speaking and listening skills are developed through oral presentations.**

### 7<sup>th</sup> Grade Gifted English

#### 0700

**Seventh grade Gifted English includes all of the components of seventh grade English, and students are provided with enrichment opportunities to gain a deeper understanding of course content. Many enrichment opportunities are project-oriented, providing students with the ability to further refine both independent working and collaborative skills, while further developing critical thinking, reading, listening, speaking, research and technology skills.**

### 7<sup>th</sup> Grade Reading

#### 0721

### 8<sup>th</sup> Grade English

#### 0810

**Eighth grade English continues to form a solid foundation for the Secondary English Language Arts Program. Instruction in reading, writing, listening, speaking, and research is delivered on a broader and deeper level in the eighth grade program. Understanding fiction and nonfiction, components within/between texts, literary devices, and organizational concepts within texts assist in both understanding literature and developing reading skills. Students focus on various types of literature such as short story, novel, poetry, and nonfiction.**

**Students learn the five domains of effective writing by producing works in the expository/informative, persuasive, and narrative modes. Students also continue the process of research as they compose a research paper.**

### 8<sup>th</sup> Grade Gifted English

**0800**

**Eighth grade Gifted English includes all of the components of eighth grade English, and students are provided with enrichment opportunities to gain a deeper understanding of course content. Many enrichment opportunities are project-oriented, providing students with the ability to further refine both independent working and collaborative skills, while further developing critical thinking, reading, listening, speaking, and research skills.**

### 8<sup>th</sup> Grade Reading

**0821**

### 9<sup>th</sup> Grade English

**0130**

**Ninth grade English continues to emphasize instruction in integrated reading, writing, listening, speaking, grammar, usage, and research. The literature includes a variety of genres featuring short story, poetry, prose forms, and drama. Students are exposed to a broad range of types of literature through the American, British, and World selections presented throughout the text.**

**Students utilize the five domains of effective writing while producing works in the expository/informative, persuasive, and narrative modes. Students also continue the process of research as they compose a research paper.**

### 9<sup>th</sup> Grade Advanced English

**0110**

**(Pre-requisite: 85 average or better in English 8 and teacher recommendation)**

**Ninth grade Advanced English includes all of the components of English 9, as students read, write, listen, speak, research, and participate in collaborative learning strategies at an accelerated rate. A variety of reading/writing experiences develop skill with cause-effect relationships, vocabulary development and usage, critical thinking (concepts, content, composition). Selections provide a variety of enrichment reading opportunities for student synthesis. Analysis and problem solving techniques complement the reading writing features of the course and become assimilated into student discussion. Pre-reading focus, motivation, purpose-setting questions, cross-curricular connections, multiculturalism- all play integrated roles in this curriculum.**

### 9<sup>th</sup> Grade Gifted English

**0900**

Gifted English 9 includes all of the components of Advanced English 9, and students are provided with enrichment opportunities to gain a deeper understanding of course content. Many enrichment opportunities are project-oriented, providing students with the ability to further refine both independent working and collaborative skills, while further developing critical thinking, reading, listening, speaking, and research skills.

#### 10<sup>th</sup> Grade English 0231

The English 10 curriculum consists of a blend of reading, writing, and speaking skills. Students are required to read and analyze American literature in order to experience fundamental features of diverse literary styles and genres. The critical analysis of American literature broadens and deepens textual comprehension. Simultaneously, it strengthens meaning and historical significance, while incorporating and emphasizing student connections.

Students compose several process writing compositions covering a variety of topics and incorporating different modes and styles. Effective writing domains – focus, content, organization, style, conventions – are addressed through process writing compositions with an emphasis on appropriate language and sentence construction as they pertain to style. Students continue the research process by completing a research paper using varied sources.

#### 10<sup>th</sup> Grade Advanced English 0210

(English 9 Pre-requisite: 85 average or better and teacher recommendation  
Advanced English 9 Pre-requisite: 85 average or better OR 75 average or better with teacher recommendation)

Tenth Grade Advanced English includes all the components of English 10, as students study American literature within the framework of American historical settings. Additionally, the Advanced English curriculum provides enrichment through supplemental reading, variety and depth of student written responses, and a greater sense of comprehension within the curriculum. Students are challenged by an accelerated pace of critical reading, analysis, application, and response to literature that is maintained and reinforced throughout the year.

11<sup>th</sup> Grade English  
0331

The 11<sup>th</sup> grade English course focuses on British literature. Students study various British historical settings within the framework of British literature. Students read varied core reading selections – including works from noted authors such as Shakespeare, Chaucer, Swift, and Orwell. The reading of selections from numerous British authors generates student reflection and response. In preparation for Keystone testing, a variety of student written responses and a continuing growth in language arts is integrated into the course. Process writing assignments are emphasized incorporating a variety of writing techniques using focus, content, organization, style, and conventions.

11<sup>th</sup> Grade Advanced English  
0310

(English 10 Pre-requisite: 85 average or better and teacher recommendation  
Advanced English 10 Pre-requisite: 85 average or better OR 75 average or better with teacher recommendation)

Eleventh grade Advanced English includes all the components of English 11 as they read, write, listen, speak, research, and participate in collaborative learning strategies at an accelerated rate. Students are challenged by critical reading and analysis of British literature selections, novels, and integrating an in depth study of the English language development. A multiplicity of topics, modes, and styles are incorporated including on-demand writing techniques to assist in preparation for the Keystone and SAT standardized tests. Students will continue the process of research as they compose a formal literary analysis paper.

12<sup>th</sup> Grade English  
0431

The English 12 curriculum complements all previous integrated language arts instruction as it prepares students to participate in the global community. Students read a variety of genres from various ages and cultural settings as they study world literature. Critical thinking skills are developed as students make frequent connections between personal experience with text and a broader world view. Students utilize the five domains of effective writing while producing works in the narrative, persuasive, and informative modes—including resume and letter writing. Process writing and writing assessment blend with the instruction of grammar and reading throughout the English curriculum.

12<sup>th</sup> Grade Advanced English  
0410

(English 11 Pre-requisite: 85 average or better and teacher recommendation  
Advanced English 11 Pre-requisite: 85 average or better OR 75 average or better with  
teacher recommendation)

Twelfth includes all the components of English 12 as they read, write, listen, speak, research, use technology, and participate in collaborative learning strategies at an accelerated rate. Students are guided by questions of levels of increasing complexity, recalling, interpreting (inference and analysis), and applying (generalization, extension, judgment). World literature selections provide a variety of enrichment reading for student synthesis, and students are offered choices and greater flexibility. A multiplicity of writing topics, modes, and styles are incorporated as students progress according to their abilities. Students continue the process of research as they compose a formal literary analysis paper.

Project Study 10  
0200

The independent learning project, Project Study 10, is intended to further expand learning experiences.

Academically Gifted students, guided by a teacher-advisor, select topics to research throughout the year. Students meet with the teacher-advisor on a regular basis to assess progress on the project. Because of the individual programming involved, the exact amount of time each student meets with the teacher-advisor is a matter to be determined by the nature of the assignment and the individual student's needs. Within the framework of the independent learning project, a learning contract is employed between the student and the teacher-advisor to describe the assignments, requirements for completion, and methods of evaluation. The ultimate goal of Project Study 10 is for students to further develop independent learning skills and to ultimately be able to apply those skills to learning situations outside of the school environment.

Project Study 11  
0300

Students who have successfully completed Project Study 10 are recommended to take Project Study 11, which is an extension of the independent learning opportunities found in Project Study 10. Depending on the student's individual academic needs, students may be involved in academic acceleration beyond the school environment. Like the Project Study 10 independent project, the student meets with the teacher/advisor to determine project specifications, timelines, and evaluations.

### Project Study 12

#### 0400

Seniors who have successfully completed Project Study 0200 or 0300 are recommended by the Gifted teacher for Project Study 0400. In the senior year, like Project Study 10 and Project Study 11, this is an individually-selected learning opportunity. Many students opt to take college course at King's College in the College Discovery Program, at Wilkes University in the Young Scholars' Program or Luzerne County Community College. Regular conferences are scheduled with the home school Gifted teacher to determine progress made on the independent learning project.

### SAT Prep-English

#### 0251

The SAT English course is presented as an elective to sophomores, juniors, and seniors who are motivated to achieve high scores on the College Board's SAT Examination. Sentence completion, critical reading, grammar, writing and vocabulary are focus areas addressed in this course. Strategies for taking the SAT are presented, explained, and practiced, as students receive as much individual assistance as possible to ensure their success with the actual SAT Examination. Pre-testing and post-testing procedures document student improvement as the course progresses. Practice examinations are carefully explained as teacher and students review strengths and address areas for improvement. Instruction correlates with actual testing procedures to ease student test anxiety and promote student confidence.

### Journalism

#### 0500

Journalism is a semester course designed to provide an overview for students interested in journalism and developing their skills as writers. Students will learn the fundamentals of news, feature, editorial and sports writing, as well as copy reading, news style and editing. Students will create numerous original stories using varied structures and writing techniques. They will also learn to develop computer generated layouts and graphics. Students will be given opportunities to begin work on a professional portfolio as well as publication in the school newspaper and yearbook.

### Public Speaking

#### 0510

##### Public Speaking I

Students will learn to articulate themselves through a variety of oral and written communication methods. Students will learn proper techniques for basic listening and speaking skills; how to write effective critical responses to speaking, listening, and reading experiences; persuasive techniques in writing and proper speech

techniques for interviews and formal environments. Throughout the course, students will draft, revise, and present speeches in order to better their public communication skills, as well as perform rehearsed dramatic interpretations on popular social issues, and be presented with activities to gain confidence in impromptu speaking.

#### Public Speaking II

**0520**

**(Pre-requisite – Public Speaking I)**

This course provides the opportunity to enhance and extend the skills students developed in Public

Speaking I. In addition to enforcing prior knowledge from Public Speaking I, students will write, revise, and present speeches that portray interpretations and analysis of literary works, and current events, incorporating concrete evidence and research into speeches. They will write and revise original dramatic interpretations on popular issues; and learn the techniques of the advanced interview process to hone the skills of impromptu speaking.

#### Research Seminar

**0530**

**(One year of Research Seminar is required for students in English. Research Seminar is an Elective for students in Advanced English)**

The Research course will focus specifically on research, writing, and formatting techniques for both MLA and APA style research papers. Students will select meaningful topics, gather and analyze information through research, and write comprehensive research papers synthesizing the information gathered. Students will learn how to analyze texts, make and support arguments, cite sources, and revise written work. Students will also develop a formal writing style, employ a broader vocabulary, and develop sophisticated sentence structures. This class is writing intensive and students must be prepared to read, write, research, outline, draft, revise, and edit their work.

#### Advanced Placement English 12

**0415**

**(Pre-requisite: See Guidance Counselor or AP English Instructor)**

AP English Literature and Composition engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone.

**AP English is a college-level course designed to prepare you for writing in college as well as for taking the AP English Literature Exam in May. The reading selections and writing assignments are rich and challenging; the pace of the class will be intense. We will concentrate on analyzing literature by doing "close readings" and on developing other skills necessary for the exam. The analytical skills you learn in this class will serve you well throughout the rest of your academic career.**

#### Literature Keystone Acceleration

##### **0540**

**(Keystone Acceleration is required for students who are not proficient on 7<sup>th</sup> or 8<sup>th</sup> Grade PSSA Reading Assessment or who are not proficient on 9<sup>th</sup> or 10<sup>th</sup> Grade English Quarterlies)**

**This course helps students prepare for the Pennsylvania Keystone Exam in Literature. The content of this course focuses on the assessment anchors for the Literature exam as outlined by PDE and includes both fiction and non-fiction material. The course integrates assessments and exercises throughout the lessons to reinforce the required literary concepts, help students comprehend the key literary themes in each work or genre of literature, and practice effective reading and responding strategies.**

#### Cultural Perspectives through Children's Literature

##### **0560**

**This course will focus on using a diverse group of children's literature to critically think, speak and write about the cultural perspectives shown through that literature. Students will learn how to create a children's book. The students will publish their book in print or online.**

#### Literature in Film

##### **0570**

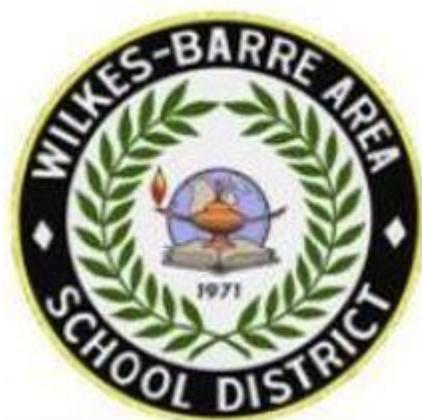
**(Pre-requisite: 11<sup>th</sup>/12<sup>th</sup> Grade students with an 80% or above in previous year's English course)**

**This elective course will seek to examine a variety of topics in literature and film, including the connections and interplay between the two artistic mediums. Primarily, this will be a course in literature & film analysis, highlighting the elements of "story" present in both. In addition, selected novels, stories, & plays will be analyzed in relation to film versions of the same works in order to analyze and explore the possibilities &/or problems involved in the transfer from page to screen. This course will also delve into films that do not have written work as their inspiration to explore how these films reflect and work in relation to an understanding of the elements of literature.**

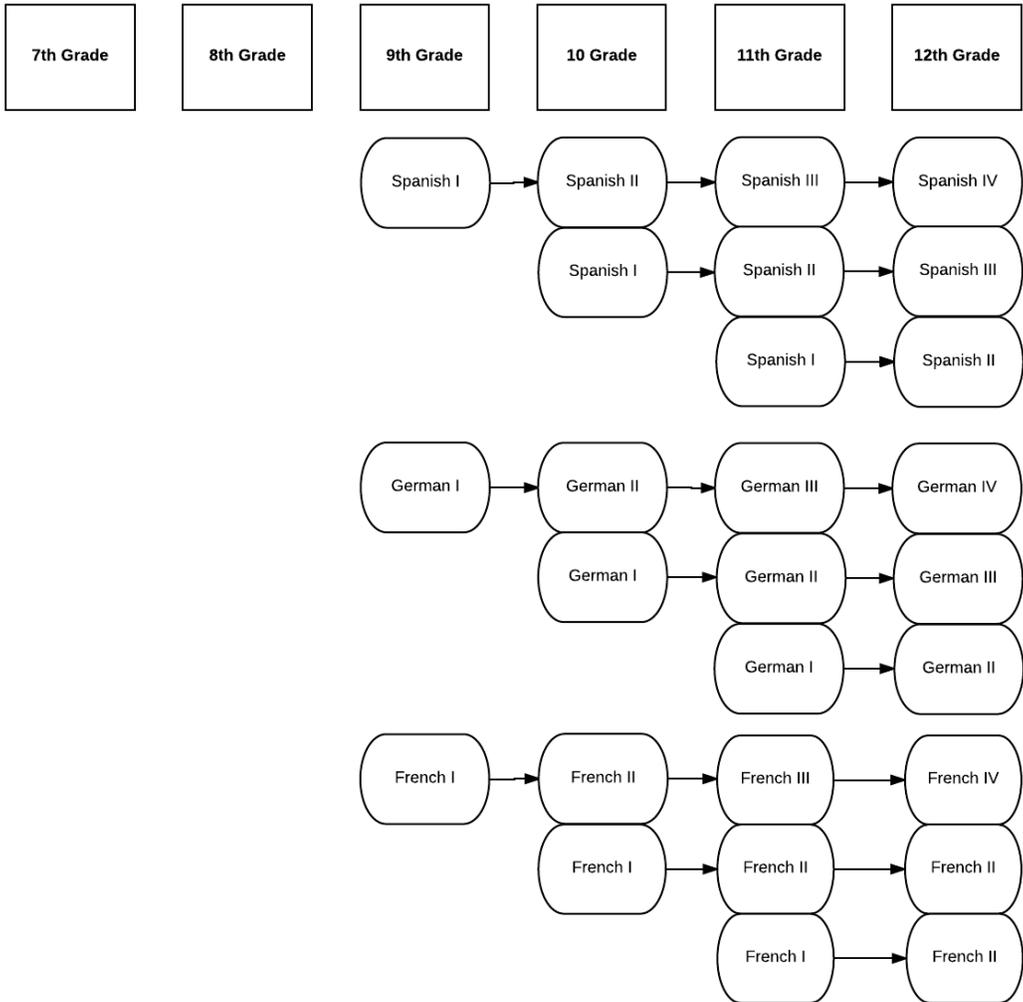
Creative Writing  
0580

**Creative writing emphasizes improving each student's ability to communicate using the written word. Students will study the written word through a variety of methods, including exploring the writing process, journal writing, poetry, short stories, plays, and other genres. Students will read, interpret, and analyze a variety of poems and short fictional works by a variety of authors, including their own works. Through reading and writing activities, students will gain a sound understanding of the elements and forms of writing to create their own written creations. Aside from broadening students' literary scope, helping them read with a critical eye, and exposing them to constructive criticism, this class will most importantly cultivate an artistic appreciation for the beauty of language.**

# FOREIGN LANGUAGE DEPARTMENT



# Foreign Language Course Sequence



## FOREIGN LANGUAGE

### Spanish I

**1123**

**An introduction to the sounds and structure of Spanish with an emphasis on the spoken language in the presentation of basic grammar and vocabulary. Vocabulary development with emphasis on high frequency words used in daily life.**

### French I

**1120**

**French I is designed to introduce all four skills necessary to language learning: listening comprehension, speaking, reading, and writing. Tapes based on the text enforce the listening comprehension. Enrichment materials such as songs, games, maps, and pictures add variety and sustain interest.**

### German I

**1121**

**This course presents to the student the basic sounds of German in simple conversational patterns followed by the reading and writing of simple German. Vocabulary and basic grammatical concepts are acquired. Students gain some knowledge of German culture and civilization through consideration of daily activities of the people.**

### French 2

**1220**

**French II continues development of hearing, speaking and comprehension abilities initiated in French. There is increased emphasis in reading and writing. Verb study is expanded. French is the language of the classroom; grammar is reviewed and reinforced and more complicated structures are presented. Students are encouraged to develop practical and realistic goals of travel and further study. French club and pen pals in France stimulate further interest in the target language, its people, its culture, and its country.**

### German 2

**1221**

**The course first reviews the basic grammatical concepts and then proceeds with the practice of listening, speaking and writing of more advanced forms of the language. There is greater stress on diction, vocabulary development, and the more difficult grammatical structures. New phases of German culture and civilization are introduced. A supplementary reader is used if time permits.**

Spanish 2  
1223

**A continued emphasis on correct pronunciation, grammar, vocabulary, composition, oral practices, and reading are the basis for this course. Cultural aspects developed through consideration of daily aspects of Spanish and Hispanic life.**

French 3  
1320

**Review the fundamentals of grammar with emphasis on more difficult aspects. Vocabulary building and active use of the language. Introduction to French literature. Free and directed composition.**

German 3  
1321

**The third year course increases the student's control of the essential patterns of German listening, speaking, reading, and writing. There is a continued development of vocabulary active and passive. The finer points of grammar and composition, both oral and written are introduced. Literary selections are based on the ability, interest and maturity of the student. Aspects of daily life, which contribute to cultural understanding, may include government, education, geographic factors which affect economic life and history.**

Spanish 3  
1323

**Review the fundamentals of grammar with emphasis on new and more difficult aspects of the Spanish language. Refinement of pronunciation and intonation increased oral practice to develop conversational skills, free and directed composition to increase skill in writing literary works are consistent with the interest and the ability of the students.**

French 4  
1420

**Major emphasis on cultural activities which will familiarize the student with the historical trends in French literature as exhibited in various genres.**

German 4  
1421

**Continues to build an understanding of advanced grammar and composition with additional vocabulary study. These points are stressed; a broader knowledge of the language, oral and written; a better understanding of the history, institutions,**

**ideals, culture of Germany; a comparison and contrast of our language and culture with that of Germany. Assessment of culture continues through study of literature selected with ability and interest of the students the determining factor.**

Spanish 4

**1423**

**Continued review of fundamentals of grammar with emphasis on newer aspects and exceptional aspects of the Spanish Language. Refinement of pronunciation, development of ability to comprehend native speakers and to speak in context understandable to native speakers. Continued consideration of characteristics of Hispanic life. Selection of literature is based on ability and interest of students.**

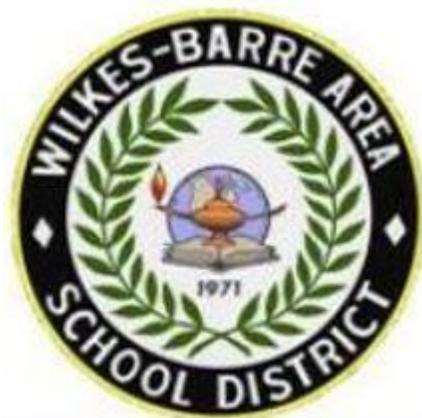
Spanish I for Native Speakers

**1100**

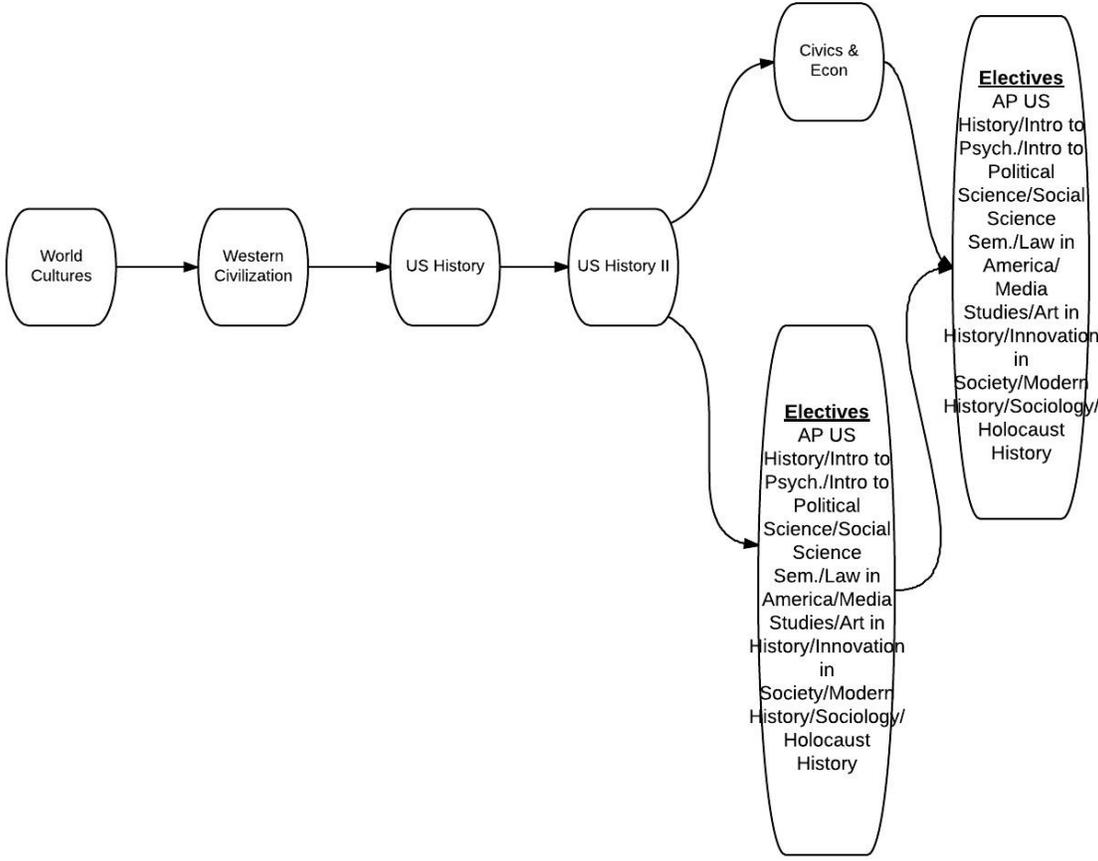
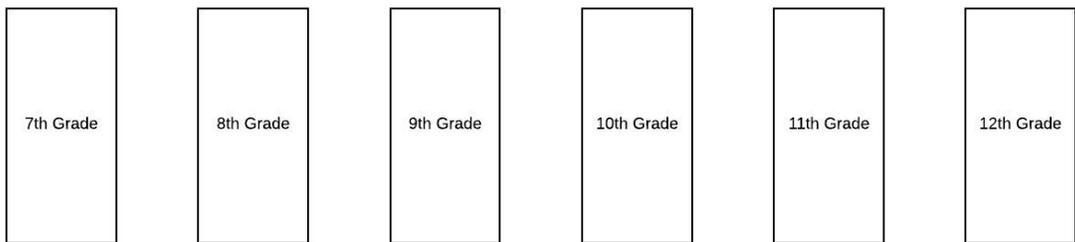
Spanish II for Native Speakers

**1110**

# SOCIAL STUDIES DEPARTMENT



Social Studies Course Sequence



## SOCIAL STUDIES

### 7th Grade Social Studies – World Cultures

**2720**

**This course will cover major geographic, cultural, historic and global events in addition to major cities, world landmarks and wildlife. It has been designed to be the building blocks which will serve as the foundation for future social studies courses that students will take in 8th, 9th and 10th grade. It is therefore, a physical, human and cultural analysis. Emphasis is given to reinforcing basic geographic skills and the introduction of new ones with the use of technology. Students learn that interplay of human, cultural, and geographic factors as influences on ways of life are important. This program is based on and incorporates Literacy Standards as well as the Social Studies Standards. Various strategies that will increase reading comprehension and promote cross curriculum lessons will be the mainstay of this course.**

### 8th Grade Social Studies- Western Civilization

**2820**

**The Eighth Grade Social Studies Course is a standards-based program that examines World History and the rise of early civilizations from the Birth of Civilization to the Exploration of the Americas. Students will study the cultural and geographical interactions from the Acropolis to North American Colonies with an emphasis on expansion, innovation, and exploration of the various regions. Various strategies that will increase reading comprehension and promote cross curriculum lessons will be the mainstay of this course.**

### United States History I

**2130**

**At this grade level the prescribed course of study in United States History deals primarily with the economic, political, social, and cultural growth of the United States from 1763 to 1910. This course also includes an overview of the theory of government inherent in the Declaration of Independence, the Constitution, and other historical documents as they relate to an understanding of our American heritage as well as their reflections in present-day America. Students will use current events to relate themes of the past with the present and increase their understanding of the influences of other nations on the United States. They will examine major political conflicts, the settlement of western lands and its impact on growth and identity of this country. The Interpretation of Primary Documents, the accessing of prior knowledge, and utilization of recently learned materials will be combined to familiarize students with writing in the style of a certain historical period. A strong emphasis will be on the development of reading comprehension skills as well as writing, speaking, and listening skills.**

## United States History II

2220

Tenth grade Social Studies requires the study of American History from Imperialism to the Twenty First Century. It focuses on different themes in history from Modernization to the Present Day. Students will learn the economic, political, social, and cultural changes brought about in various time periods and how they relate to the growth and expansion of this great country. They will analyze the changing of American foreign policy from isolationist to interventionist. Readings, writings, and discussions will be used to examine in full the causes and effect of warfare on the United States with an emphasis on the home front and major conflicts at home and abroad. The impact of minority groups and their changing roles and struggles in society will be explored along with the current events going on. Students will be assessed in a variety of ways including essays, projects, group discussion, and debate while meeting state standards that cross a variety of curriculums.

## Advanced Placement (AP) United States History

2310

(Prerequisite: Teacher Recommendation and US I and II.)

AP U.S. History is a junior/senior elective designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States History. This is a challenging course that is meant to be the equivalent of a freshman college course and can earn students college credit. It is a rigorous survey of American history from the age of exploration and discovery to the present. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Emphasis is placed on critical and evaluative thinking skills, essay writing, interpretation of original documents, and historiography.

## Civics/Economics

2321

The Civics and Economics is a standards based program that emphasizes both civics and economics content with the purpose of motivating students to learn about the foundations of government and citizenship, the American economic and legal systems, and how to make a difference through active civic participation. It has a friendly writing style and systematic, thorough skills instruction that provides students with the tools they need to become responsible, engaged citizens. This course promotes active civic participation, and provides a solid coverage of basic economic principles which will promote student understanding of the American economy. Students will also employ indispensable technology resources, including *I-Civics*, and *Ever-fi* which will increase hands on participation during this course. This course is required for graduation.

### Introduction to Psychology

2423

Psychology is an area of study that contributes to an understanding of the student's behavior and the relationship of his behavior to that of his peers. The student is introduced to the biological and social determinants of behavior; the learning process principles of perceptual organization motivation; variations mental health, and other determinants that have a direct and indirect influence upon the student's maturation and commonly described as reasoning or problem-solving skills. Some examples of these skills are the ability to analyze complex situations in terms of psychological concepts, the ability to apply psychological principles to new situations, identifying the assumptions in statements about behavior, detecting psychological fallacies, and making valid inferences from psychological data. A great deal of time is spent on the development and how it will affect the student later in life with home situations, parenting, and divorce.

### AP Psychology

2424

This course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas.

### Introduction to Political Science

2433

Political Science concerns itself with the foundation, structures, functions and services of the American federal, state, and local government. It provides perspective for the study of current problems by encouraging students to read newspapers and magazines, monitor television news programs, etc. A number of activities are specifically designed to familiarize the student with nature and function of local government. Community oriented activities are emphasized. The course also includes a unit of study on comparative government. This unit compares the structure and function of the American system with major European powers on all levels of government. The reading, writing, speaking, and listening standards are addressed as well as the Social Studies standards for civics and government.

### Social Science Seminar

#### 2440

The seminar is designed to engage students in the investigation of current global, national, and regional issues. This course will challenge students to study the critical issues facing our world and evaluate news events of interest and importance. Units of study will be topical, including but not limited to peace and security interests, health issues, economic concerns, and political events. Learning activities will include analyzing case studies, listening to ideas and opinions of other students, conducting an investigation, brainstorming, studying films, working in community projects, comparing and contrasting points of view utilizing social science books and articles. This course is an elective and is offered to seniors.

### Law in America

#### 2450

This is an elective course open to all juniors and seniors. It is designed to be a survey of the American legal system covering elements of both civil and criminal law. Special attention is given to such careers as attorney, legal assistant (paralegal), and business law enforcement officer. Topics include: introduction to the American legal system, trial procedure, criminal investigation, juvenile law, contracts, property, torts, family law, and wills and estates.

### Media Studies

#### 2550

This is an elective course open to approved juniors and seniors. It is a two semester course. One semester focuses on the foundations of journalism using English subject based curriculum. The other semester will focus on Social Studies based curriculum, studying the historical, sociological, and political impact the media has gone through from the beginning of mass media through the present. Students will be required the complete projects involving the school newspaper and school yearbook as part of their quarterly grades.

### Art in History

#### 2560

**Description:** This is an elective course open to all 10th-12th grade students. This course is designed to give students the opportunity to discover, appreciate, and acquire knowledge of art history through the ages. Students will learn to examine and critically analyze major forms of artistic expression from various cultures. Students will examine architecture, manuscripts, painting, drawing, printmaking and sculpture, as a reflection of a given civilization and time period. This class will give students the opportunity to use their prior knowledge of history, geography, politics, religion, languages, science, literature, and the visual arts.

### Modern US History

2561

**This course will define the principal political, social, economic, and cultural forces after World War II to the present day. Emphasis will be given to the challenges and changes at home and abroad which the United States has experienced during the Cold War and post-Cold War era with the development of the world's largest military industrial-scientific complex.**

### Sociology

2570

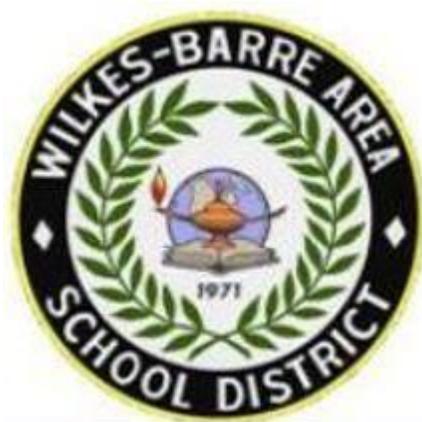
**This course aims to provide students with comprehensive knowledge and relevant skills in the field of sociology in preparation for more advanced educational exploration into the subject and application to real life experiences. By investigating classical and contemporary sociological theorists, students can apply distinct perspectives of sociology to evaluate social groups, institutions, and problems. The process of socialization occurs for individuals in different ways, through various life stages, and the agents contributing to socialization are essential to this study. In society individuals are stratified by social class; recognizing the classification and impact of social class is a complex and rich subject explored as a way to understand why individuals are treated differently based on their background. As students examine how American society operates and how people behave, they explore topics including family, minority groups, crime, prison, and poverty.**

### Holocaust History

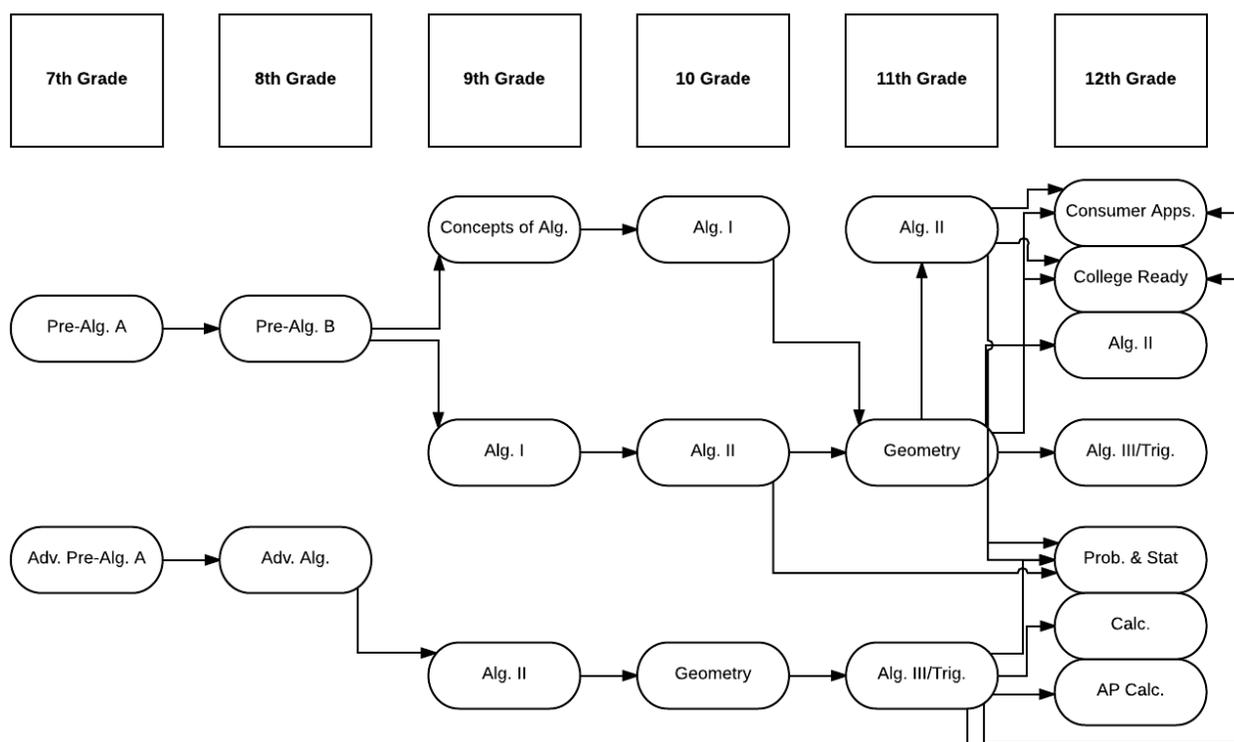
2580

**This course covers the background to and implementation of History's most egregious crime. The course covers the roots and development of Antisemitism in European society from ancient times up to and including the 20th century, as well as, the life and ascent of Adolf Hitler and the National Socialist Party to complete control of Germany. The course briefly discusses both world wars in relation to their impact on the eventual Holocaust and discusses the mechanical operation (ghetto and camp systems) of the Nazi plan to attain a "Final Solution to the Jewish Question". The course finishes with an examination of active resistance inside Germany as well as the Nuremberg War Crimes Trials in 1945-1946 and the establishment in 1948 of the state of Israel.**

# MATHEMATICS DEPARTMENT



## Mathematics Course Sequence



## MATHEMATICS

### 7<sup>th</sup> Grade Advanced Pre-Algebra

**3730**

**(Pre-requisites: Multiple criteria will be used for placement into this course. Areas that will be a focus include PSSAA results, the 7<sup>th</sup> grade placement exam, district assessment results, teacher recommendation, final average in 6<sup>th</sup> grade math and attendance.)**

Students that arrive during the school year will be tested in guidance before they can enter this class. Provisions will be in place for them to be tested using the computer and scores sent directly to the guidance counselor.

To stay in the advanced track students must maintain an 85% or higher. If a student falls below the 85%, teacher recommendation will be considered.

The 7<sup>th</sup> Grade Pre-Algebra Math Course provides students with a comprehensive arithmetic curriculum along with an introduction to algebra. This course will include improved proficiency of arithmetic concepts such as fractions, percentages, statistics, and geometry. The units in this course will include concepts of problem solving and application pertaining to integers, variables, and equations. These topics are an integral part of the mathematics background needed for Algebra I. Students must maintain an 85% or higher to continue on to the 8<sup>th</sup> Grade Advanced Algebra 1.

### 7<sup>th</sup> Grade Pre-Algebra A

**3720**

The 7<sup>th</sup> Grade Pre-Algebra A Math Course is designed to prepare students for success in Algebra I and the current requirements of the PSSA test. This course will introduce the fundamental Algebra skills involving variables, expressions, and equations. There is a strong emphasis on problem solving and application of math as related to the PA State standards in mathematics. Students must maintain a 75% or higher to continue on to 8<sup>th</sup> Grade Pre-Algebra B. Students earning higher than a 75% will have the opportunity to move to the 8<sup>th</sup> Grade Advanced Algebra I Course.

### 8<sup>th</sup> Grade Advanced Algebra I

**3830**

**(Pre-requisites: Multiple criteria will be used for placement into this course. Students must have a final average of 85% or higher in Advanced 7<sup>th</sup> Grade Pre-Algebra. Other focus areas include district assessments and teacher recommendation.)**

The 8<sup>th</sup> Grade Advanced Algebra I stresses the concept and problem solving characteristics of Algebra 1. Problem solving strategies are introduced early on and carried throughout the course in line with the Algebra I curriculum and content. This

course is a comprehensive study of Algebra 1 at an accelerated pace. Students must maintain an 85% or higher to continue on to the 9<sup>th</sup> Grade Advanced Algebra II.

#### 8<sup>th</sup> Grade Pre-Algebra B

**3820**

The 8<sup>th</sup> Grade Pre-Algebra B Math Course is a continuation of a two- year sequence that will reinforce key topics of Pre-Algebra, promote mastery of the essential concepts of beginning Algebra and prepare students for the rigor of an Algebra 1 course. There is an emphasis on problem solving and application of math as related to the PA State standards in mathematics.

#### Algebra I

**3123**

**(Pre-requisites: Successful completion of Concepts of Algebra Part II or Pre-Alg B.)**

This course stresses the concept and problem solving characteristics of Algebra. It is based upon the PA Core State Standards in preparation for the Pennsylvania Algebra 1 Keystone Exam. This course introduces students to the structure and properties of the real number system, and the significance of those properties in solving equations and inequalities. The language and symbolism of Algebra are emphasized. Techniques for solving word problems are incorporated. Logical thinking skills will be developed. This is a college prep mathematics class intended to prepare students for upper level mathematics content and the Keystone Exam.

#### Algebra II

**3325**

**(Pre-requisites: Successful completion of Advanced Algebra I.)**

This course is a continuation of Algebra 1. Students enrolling in this course are expected to apply prior algebra knowledge in order to enhance current algebra practices. The focus of this course is on critical thinking, decision-making and problem-solving strategies as they apply to the various Algebra II content areas. The concepts learned in Algebra I are reviewed and expanded into the study of products and factors of polynomials, operations on rational expressions, the complex number system, and quadratic equations and inequalities. In this course students expand their algebraic skills and knowledge to prepare for higher-level mathematics. A graphing calculator will be used to enhance key math concepts.

#### 9<sup>th</sup> Grade Advanced Algebra II

**3326**

**(Pre-requisites: Successful completion of Advanced Algebra I.)**

This course is a rigorous continuation of Algebra 1. It contains all the necessary components of the Algebra 2 course at a faster pace with enrichment projects. The focus is on critical thinking, decision-making and problem-solving strategies as they apply to the various Algebra II content areas. The concepts learned in Algebra I are reviewed and expanded into the study of products and factors of polynomials, operations on rational expressions, the complex number system, and quadratic equations and inequalities. In this course students expand their algebraic skills and knowledge to prepare for higher-level mathematics. A graphing calculator is used to enhance understanding of key math concepts.

9th Grade Concepts of Algebra  
3120

The 9<sup>th</sup> Grade Concepts of Pre-Algebra Part II Course is a continuation of the arithmetic principles and their uses in Algebra. There is a continued emphasis on strengthening the basic skills required to succeed in upper level math courses. In addition, this course is geared to provide help in understanding math concepts that have not yet been mastered.

Geometry  
3230

(Prerequisite(s): Completion of Algebra II.)

This course uses the knowledge obtained in Algebra II using an analytical approach. Postulates for segments, angles, points, lines and planes are introduced. Next, styles of proofs are studied followed by the properties of parallel lines. Triangles and their properties are studied in-depth along with their theorems. At this point, proofs are introduced. This abstract concept is then carried on throughout the remainder of the course. Polygons are studied exhaustively including identification of parts, classifying, theorems, properties and proofs. Similarity is introduced and taught regarding triangles as well as right triangles. The course concludes with a comprehensive study of circles along with perimeter and area of polygons. Surface area and volume of three-dimensional figures is reviewed. Problem solving strategies are introduced early on and carried throughout the course.

Advanced Geometry  
3231

(Pre-requisites: Successful completion of Advanced Algebra II.)

**Course Description:**

This course uses the knowledge obtained in Algebra II in an analytical approach. Geometry enables a student to study relationships between geometric figures and deductive reasoning. This course develops a logical mathematical system using definitions, assumptions, properties and theorems. The accelerated content also

includes coordinate geometry, transformational geometry, solid geometry, and an introduction to Trigonometry.

#### Trigonometry Pre-Calculus

**3426**

**(Prerequisite(s): Teacher Recommendation)**

This course is a prerequisite for Calculus and AP Calculus. One half of the course is built around the six trigonometric functions. The functions are defined from previously learned algebraic and geometric concepts. These functions allow the student to solve problems and applications of right triangles. Concepts include verifying trigonometric identities, solving trigonometric equations, graphing trigonometric equations, and applying the laws of sine and cosine.

During the other half of the course students will rely on a solid background in algebra and geometry as they deepen their understanding of equations and inequalities relating to linear, quadratic, and higher degree polynomials. Exponential, logarithmic, polynomial and rational functions are emphasized. Relationships are made between the equations and graphs of the conic sections, exponential, and logarithmic functions. Study will include the concept of limits and the derivative to prepare for Calculus. Students will be able to solve problems in the areas of trigonometry, analytic geometry and upper-level algebraic concepts. An emphasis will be placed on the four approaches: algebraic, numerical, graphical, and verbal. A graphing calculator will be used to solve problems.

#### Calculus

**3423**

Purpose of this course is to present the concepts that lie at the heart of calculus. The course includes the treatment of functions, series, sequences, limits, continuity, exponential functions, convergence, the derivative, applications, the integral maxima/minima, partial derivative, and rules for differentiation/integration, conic sections, and vectors.

#### Advanced Placement Calculus

**3413**

This course covers the topics in the calculus course but at a faster pace to prepare students to take the AP Calculus Exam.

#### Consumer Applications

**3424**

**(Pre-requisites: This course is only open to seniors.)**

This course is designed to fill the immediate needs of students entering society. The course stresses those applications of mathematics they are a part of everyday living. Topics include jobs, computing pay, automobile expenses, insurance, taxes, budget, commissions, deductions, wages, salary, banking, housing, remodeling, recreational expenses, credit cards, checking and savings accounts, transportation costs, housing costs, and household budgets.

College Ready Math  
3500

(Pre-requisites: Students enrolling in College Ready Math must have enough math credits to graduate prior to taking this course, students must have a grade of "C" or higher in the math course taken prior to "College Ready" math, teacher recommendation will be used to place students. Areas such as discipline, homework completion, and attendance will be focal areas.)

This course is designed to prepare seniors for college level math entry. Students will work on a series of 11 modules in a part computer/ part lecture format for the first semester of the year. They will progress through the modules at their own individual pace with teacher guidance and instruction. When all 11 modules are completed, students will then take the LCCC Accuplacer Exam. Those students that successfully pass the exam will be afforded the opportunity to enroll in a college class at Luzerne County Community College for the 2<sup>nd</sup> Semester at minimal cost.

Probability and Statistics  
3412

(Pre-requisites: Completion of Algebra II and Teacher Recommendation.)

This is a basic course that introduces frequency distributions and graphs, measures of central tendency (mean) and variation (standard deviation), counting techniques, probability, binomial distribution, normal distribution, confidence intervals, hypothesis testing, correlation and regression. The course emphasizes problems from social, behavioral, and biological sciences. A graphing calculator will be used to help solve problems. Problem solving strategies are introduced early on and carried throughout the course.

SAT Prep  
3251

(Pre-requisites: Successful completion of Geometry and Algebra II.)

This course is a complete review of topics in the New College Board's SAT. Main sections include; Arithmetic, Numbers and Operations, Algebra and Functions, Geometry and Measurement, Number Patterns, Probability, Statistics and Data Analysis. All topics focus on a student reasoning and problem solving abilities.

Other higher order problems include, but are not limited to, functional notation, radical equations, negative exponents, and absolute.

#### Keystone Acceleration

**3090**

**(Pre-requisites: Unsuccessfully attempted the Keystone Exam)**

This course is designed to improve proficiency in Pre-Algebra and Algebra skills. The following content areas will be emphasized: Operations *and* Linear Equations and Inequalities, and Linear Functions and Data Analysis. Representation of mathematical situations using different models will be used to address individual learning styles. Students will develop clear and accurate descriptions of their work using appropriate mathematical vocabulary. Calculator skills will be reinforced. Individual needs will be diagnosed and progress monitored. Students that fail the Keystone exam will move on to the second part of the Keystone Acceleration Course.

#### Keystone Acceleration Part II

**3091**

**(Pre-requisites: Students must have unsuccessfully attempted the Keystone exam and have already taken Keystone Acceleration Part I.)**

This course is designed for those students that will enter into the Algebra I Keystone Project. The course will take place in a lab based setting where students complete the Algebra I Keystone Project under the supervision and guidance of a mathematics teacher.

#### Computer Programming I

**3950**

**(Prerequisites: 80 or above in Algebra 1)**

Computer Programming 1 is a college prep course that serves as an introduction to Computer Science. Students use object-oriented programming in the C# language. Some topics include event-driven processes, modular computer programming, decision structures, loops, arrays, and classes to produce finished software programs. They use the design process to create many programs by determining specifications, designing the software, and testing and improving the product until it meets the specifications. By the end of this course, students will have a solid foundation for further study in computer science.

#### Computer Programming II

**3951**

**(Prerequisites: Completed Algebra 1 and have completed CP1)**

**Computer Programming 2** is an in-depth college prep course for those students who are interested in furthering their knowledge and understanding of computer science and writing finished programs. Students are introduced to top-down design and delve deeper into advanced computer programming concepts in the Java programming language. Some advanced topics include: defining classes, control statements, creating a user interface, arrays, and searching and sorting algorithms. By the end of this course, students will have a solid foundation for further study in computer science.

Computer Programming III (Non AP CS)  
**3952**

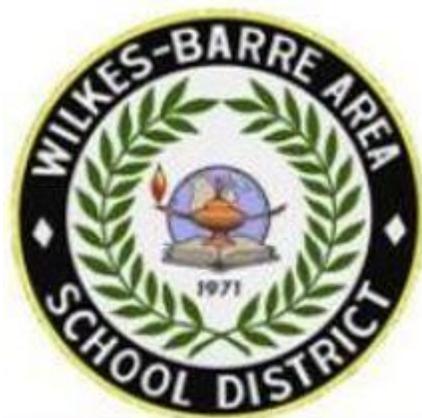
**Prerequisites:** Completed Algebra 1, Algebra 2 and have completed CP1 and CP2. **Computer Programming 3** is an in-depth and advanced college-prep course that is designed for advanced topics for those students who are interested in Computer Science in college. The first semester includes advanced topics include multi-dimensional arrays, recursion, polymorphism, and algorithm analysis all while using the Java programming language. The second semester includes other computer programming concepts including HTML5, Unity development engine, etc.

11<sup>th</sup> or 12<sup>th</sup> Grade AP Computer Science A  
**3954**

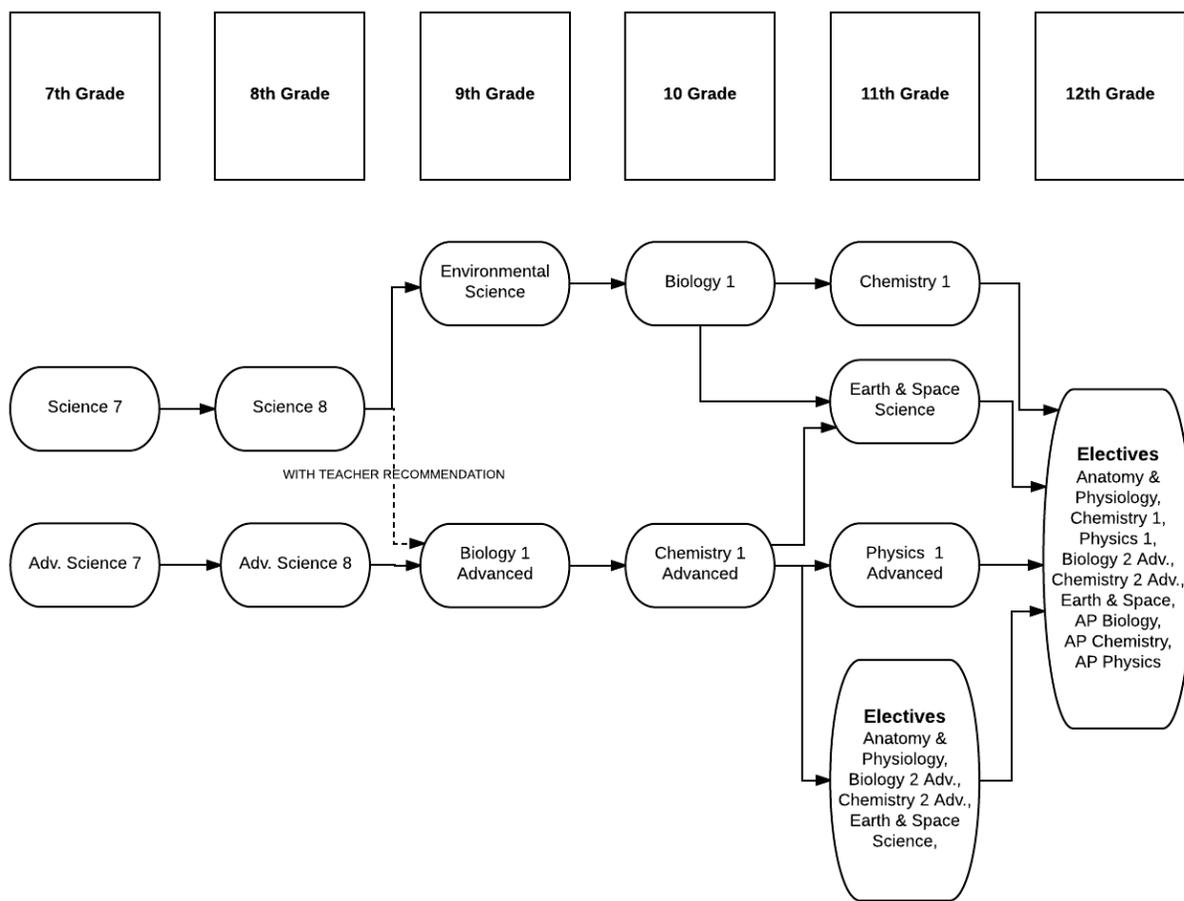
**(Prerequisites:** Completed Algebra 1, Algebra 2 and have taken and passed CP1)

**AP Computer Science A** is both a college-prep course for potential computer science majors and a foundation course for students planning to study in other technical fields such as engineering, physics, and chemistry. The course emphasizes programming methodology, procedural abstraction, and in-depth study of algorithms, data structures, and data abstractions, as well as a detailed examination of several case studies. Instruction includes preparation for the AP Computer Science A Exam.

# SCIENCE DEPARTMENT



Science Course Sequence



## Science

### Science 7

#### 4720

**Science 7 focuses on three branches of science: physical science, earth science, and life/environmental science. This course provides students with a solid foundation for future science courses. Science 7 provides an introduction to topics in physics such as motion and forces; topics in earth science such as Earth's waters, atmosphere and plate tectonics; and topics in life/environmental science, such as air, water, and land pollution. Through scientific inquiry, students are engaged in these areas through hands-on activities and projects to model the area of study. Students will interpret and analyze data to determine explanations of events and activities related to the course material.**

### Advanced Science 7

#### 4720G

**Advanced Science 7 focuses on three areas of science: chemistry, biology, and physics. This course provides an introduction to topics in chemistry, such as matter and energy, atomic structure and the periodic table. Biology topics include biochemistry, cell structure, cell function, genetics and heredity. Physics areas of study deal primarily with classical mechanics. This course provides a blend of our Science 7 and Science 8 curriculum designed specifically to enrich and accelerate our students. Using scientific inquiry and analysis, students delve further into the content through hands-on activities/projects, independent assignments, use of models to explain concepts, and scientific investigations. Students are given the opportunity to further refine both independent working and collaborative skills, while further developing critical thinking, inquiry, communication, research and technology skills.**

### Science 8

#### 4820

**Science 8 focuses on three branches of science: physical science, life science, and environmental science. Science 8 provides students with a solid foundation for future science courses. This course provides an introduction to topics in physical science, such as matter and energy and the periodic table. Life science topics deal primarily with cells and heredity but details from other areas are interwoven as well. Topics in environmental science, such as the environment, ecology and human impact on the Earth are studied. Students are engaged in these areas through hands-on activities/projects to model the area of study and through scientific inquiry. Students**

will interpret and analyze data to determine explanations of events and activities related to the course material.

#### Advanced Science 8

**4820G**

Advanced Science 8 is a project-oriented course that focuses on studying the sciences through scientific inquiry, critical thinking, communication and research. This course provides a blend of Science 8 and our 9th grade Environmental Science course curriculum. It provides an introduction to topics such as scientific method through investigations, measurement, precision and accuracy preparing the student for higher level sciences with required laboratory components. Students are introduced to environmental science through topics such as interactions within an ecosystem; populations and communities; and the human impact on Earth's resources. Designed specifically to enrich and accelerate learning, students delve further into the content through hands-on activities/projects, independent assignments and use of models to explain concepts. Students complete scientific investigations using scientific inquiry and analysis methods. Students are given the opportunity to further refine both independent working and collaborative skills, while further developing critical thinking, inquiry, communication, research and technology skills.

#### Environmental Science

**4321**

This course combines principles of science with practical applications for a better understanding of the role of science in our daily lives. The integrated approach is presented in a manner readily understood by students. Discussion of science topics affecting social issues are interwoven into the content. The course is divided into four quarters with selected topics from life science, ecology, chemistry and physical science as they pertain to the environment.

#### Biology 1, Advanced

**4223**

Although this course is designed for college-preparatory students, those who plan career fields requiring a sound background in biology should also select it. Process skills, lab investigative techniques, and basic concepts learned in earlier science courses are used and expanded in the study of plant and animal life, the environment, structural ecology and functional differences, and heredity.

*(Placement in 9<sup>th</sup> grade requires instructor recommendation and a minimum 85 average in Science 8.)*

Biology 1  
4227

This course is designed to give the student an understanding in the concepts of the biological sciences. Course content has been adjusted so that basic biological concepts and problems are considered from the personal view of students and their daily lives. The academics and laboratory program provide excellent science experiences, but are less rigorous than Biology 4223.

Chemistry 1, Advanced  
4325

This is an introductory chemistry course for college preparatory students. Emphasis is on scientific method, basic chemical principles, chemical calculations, problem solving, and laboratory methods. Descriptive chemistry is undertaken where necessary for course continuity. Inquiry teaching strategies are used wherever possible. Use of calculators and computers is encouraged in solving assigned problems throughout the school year. Students who plan scientific careers are encouraged and expected to elect Chemistry 2 (4415) as a necessary follow-up for this introductory course. *Chemistry 1 placement requires student have successfully completed Biology 1, Advanced; Biology. Student should be proficient or advanced in Keystone Algebra Exam, maintained an 80 percent or better average in Algebra 1 or successfully completed Keystone Acceleration A or B.*

Anatomy and Physiology  
4500

This course introduces students to human anatomy and physiology, with emphasis on the systems of the body and how they are interrelated. Course topics will include medical terminology, basic chemistry, cell and tissue structure, anatomical identification and the functions of the structures as they relate to the systems of the human body. Laboratory work will be required, including a comparative anatomy dissection lab.

*(Anatomy and Physiology placement requires student be proficient or advanced in Keystone Biology Exam and successfully complete Biology 1, Advanced or Biology 1. The student must also be concurrently enrolled in Chemistry 1, or has successfully completed Chemistry 1. )*

Earth and Space Science  
4130

This course relates people to their physical environment from the surrounding locale to the reaches of the universe. It consists of an interdisciplinary study of principles of geology, paleontology, ecology, meteorology, astronomy, oceanography, space science, and the environment. This course is probably the most useful course of all to students in regard to their everyday experiences in the natural world. Laboratory experiences, demonstrations, and multi-media presentations are used to illustrate principles. *Earth & Space Science requires student have successfully completed 2 credits of high school science.*

#### Physics 1, Advanced

4424

The fundamental concepts involving energy-matter relationships in our physical world are studied in terms of mechanics, heat, sound, electricity, light and nuclear energy. Many examples and illustrations involving the practical application of basic scientific principles are given. Laboratory experiences provide reinforcement of basic scientific principles but in addition provide opportunity for the developing of laboratory skills and techniques. Those students desiring careers in science, medicine, engineering and mathematics should take this course. *Placement requires student have successfully completed Chemistry 1. Students should be proficient or advanced in Keystone Algebra Exam, maintained an 80 percent or better average in Algebra 1 or successfully completed Keystone Acceleration A or B. It is highly recommended that Physics 1 be taken prior to or concurrently with a level 2 science elective.*

#### Biology 2, Advanced

4413

Biology 2 is designed for high school students previously credited with a first biology course. Principal activities are laboratory investigations involving students in activities comparable to professional biologists and their problems. Content includes the process of biological investigations; statistical evaluation of data; anatomy and physiology of living systems, cell processes, and cytogenetic study. Biology 2 is scheduled seven periods each week, including two double laboratory periods. *Biology 2 placement requires students be proficient or advanced in Keystone Biology Exam and have successfully completed Biology 1, Advanced; Biology, and Successfully completed Chemistry 1.*

#### Chemistry 2, Advanced

4415

Chemistry 2 is a laboratory-oriented elective course available to students who may pursue careers in the sciences. It consists of selected topics and basic principles of inorganic, organic, analytical, physical, and radiochemistry. Mathematics treatment is more rigorous than Chemistry 1. College-level multi-texts are used, and a seminar type atmosphere prevails. This course, along with C.P. Chemistry, should adequately prepare the conscientious student for advanced placement or college equivalency

examinations. Classes meet seven periods each week. *Chemistry 2 placement requires student have successfully completed Chemistry 1.*

Science 3, Advanced Studies

4417

This course is designed for special science topics agreed between teacher and students. Lab work and independent study are emphasized. It is oriented toward each student's unique needs in college science or other career goals. Schedule is flexible. Research, lab projects, and computer technology are emphasized. *Science 3 Advanced Studies requires student have successfully completed at least one level 2 science course with instructor recommendation.*

Advanced Placement (AP) Physics

4419

The AP Physics course consists of selected topics from both Newtonian and relativistic concepts of the physical world treated in a seminar-type atmosphere. Its mathematics treatment is the most demanding of the entire science sequence. Project-type laboratory experiences are used. This course should be taken by science-major, college-oriented students with an interest in the sciences and engineering. Classes meet seven times each week, including two double laboratory periods. At the discretion of the instructor, additional laboratory time is available to students. The course prepares students to take the AP examination for college credit. *(AP Physics requires student have successfully completed Physics 1 with instructor approval.)*

Advanced Placement (AP) Chemistry

4420

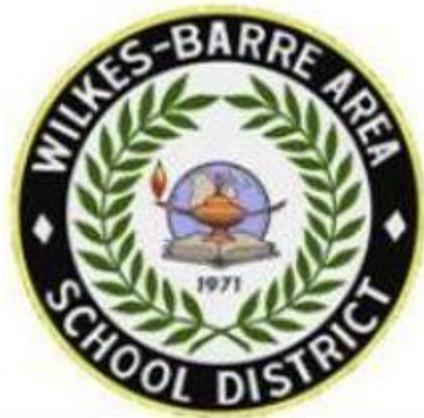
This course is designed to be the equivalent of the general chemistry course usually taken during the first college year. The AP Chemistry course is designed to be taken only after the successful completion of a first course in high school chemistry. In addition, the recommended mathematics prerequisite for an AP Chemistry class is the successful completion of a second-year algebra course. It is highly desirable that students have a course in physics and a four-year college preparatory program in mathematics. Students should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course will contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. *AP Chemistry requires student have successfully completed Chemistry 2 with instructor approval.*

Advanced Placement (AP) Biology

4510

**This course entails a rigorous, and fast- paced curriculum. It is designed to be the equivalent of the general biology course usually taken during the first year of college. The AP Biology class is designed to be taken only after the *successful completion of a first course in high school Chemistry. AP Biology requires student have successfully completed Biology 2 with instructor approval.***

# BUSINESS DEPARTMENT



## BUSINESS

### Introduction to Computer Applications

**6222**

**This course will introduce students to the keyboarding, Microsoft Office Suite; Microsoft Word, Microsoft Excel, Microsoft PowerPoint, & Microsoft Publisher. The concepts learned within this course will provide the necessary computer skills required in all disciplines.**

### Advanced Software Applications for Business and Industry

**6322**

**Students will learn advanced Microsoft techniques, strategies and skills. Using the Excel, Word, Publisher, and PowerPoint programs, students will follow an exercise-oriented approach to solving practical problems and developing effective presentations.**

### Accounting I

**6320**

**Any student who is entering 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade may register for this class as an elective. Students will learn the accounting cycle and how to apply it to business situations. They will learn the importance of keeping accurate and up-to-date business records. In addition, students will develop a basic understanding of a business financial operation. Content includes recording daily transactions in a journal, transferring data to a ledger, preparation of financial statements for a business, and completion of a business simulation. Accounting I helps students decide whether they have an interest in and an aptitude for accounting as a profession.**

### Accounting II

**6420**

**(Prerequisite course is Accounting I.)**

**This course includes advanced levels of Accounting. Advanced accounting emphasizes the principles of departmentalized corporate accounting. This course expands on topics introduced in the first-year accounting course while adding new topics about corporate accounting, budgetary planning and control, management accounting, cost accounting, and financial analysis. This course is recommended for those students who have a strong interest in accounting as a profession.**

Advanced Business Applications Skills  
**6423**

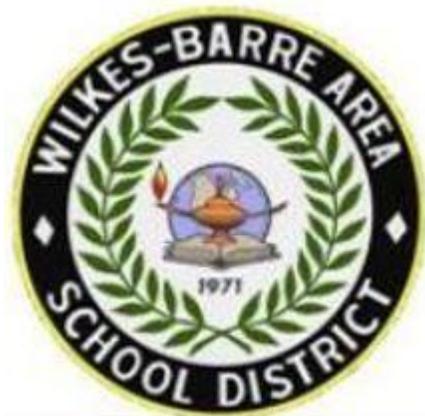
**Students will enhance their skills and knowledge of information processing through a variety of advanced technological, business-related computerized applications, projects, and office simulations. Students will prepare professional resumes and complete employment applications. Class projects will include; advanced word processing, desktop publishing, web page design, presentation software, projects that will demonstrate the ability to plan, research, analyze and prepare a Multi-media presentation. This course is recommended for all students who have completed 6322, and want to become more proficient in using all aspects of information technology skills.**

Innovation & Society  
**6490**

**Course Description:**

**This course will explore the social context for innovation and creativity. The course is open to all 9<sup>th</sup> -12<sup>th</sup> grade students who have an interest in the creative process, imagination, invention and entrepreneurship. The course will emphasize creative works; Global Relationships, Networking, and Innovations that impact societal changes. This course will be project based with an emphasis on 21<sup>st</sup> century skills with real world applications.**

# PATHWAY TO SUCCESS



## Pathway to Success

### Pathway to Success Part I

**7730**

**Pathways to Success is a course designed to help prepare Middle School students for success in the high school setting. Students will begin the course with an orientation overview designed to guide their steps as they progress through the school year. Students will learn study skills and strategies to assist in future academic courses, Math PSSA strategies, and explore potential career opportunities. Activities are designed to create a community of learners as students learn methods and strategies that can be transferred to the school and home setting.**

### Pathway to Success Part II

**7830**

**Pathways to Success Part II is a course designed to help prepare Middle School students for success in the high school setting. Students will learn study skills and strategies to assist in future academic courses and Math and English PSSA strategies. In addition, an emphasis will be placed on student exploration of potential career opportunities. Activities are designed to create a community of learners as students learn methods and strategies that can be transferred to the school and home setting.**

### 7<sup>th</sup> Grade Computer Fundamentals

**7731**

**This course and its content will be delivered in a blended learning model, combining online digital media with self-paced activities with traditional classroom methods and lectures. This course is a broad introduction to the use of computers as tools for creativity, communications and organizing information. In addition to learning the technical fundamentals of computer operations and networking, students build skills in researching information, making appropriate ethical choices about the use of computers as well as cloud computing and coding. Skills and concepts are incorporated in a manner that prepares the student for the higher level thinking involved in computer science in 8<sup>th</sup> grade.**

### 8<sup>th</sup> Grade Introduction to Computer Science

**7732**

**Designed to be the first computer science course for students who have never programmed before, ICS is an optimal starting point for exposing students to principles of computer science. Students work in teams to create apps for mobile devices using MIT App Inventor<sup>®</sup>. They explore the impact of computing in society and build skills in digital citizenship and cyber security. Beyond learning the fundamentals of programming, students build computational thinking skills by applying computer science to collaboration tools, modeling and simulation, and data**

analysis. In addition, students transfer the understanding of programming gained in App Inventor to text-based programming in Python® and apply their knowledge to create algorithms for games of chance and strategy.

#### Career Readiness

**7890**

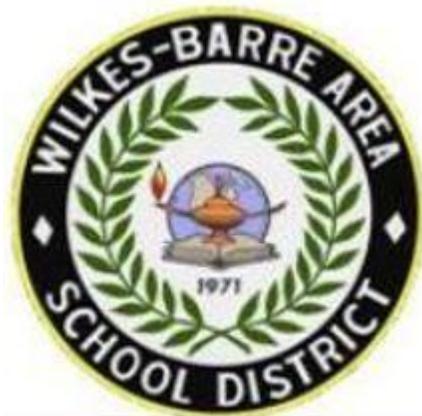
This course is offered to 11<sup>th</sup> – 12<sup>th</sup> grade students. It is designed to prepare students for success in college and career. Students will perform self-assessment and goal-setting activities, apply research and evaluation skills to execute job search, college choice, and overall career development strategies. Course content will include resume writing, interview skills, finances, and application processes.

#### Transition Planning

**7891**

This course is designed within an outcome oriented process, that promotes movement from; (a) school to post-school activities, including postsecondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation; (b) is based on the student's needs, taking into account the student's preferences and interests; (c) includes instruction, related services, community experiences, the development of employment and other post-school objectives, and when appropriate, acquisition of daily living skills and functional vocational evaluation.

# MUSIC DEPARTMENT



## MUSIC

### General Music 7 & 8

**8832**

The course is designed so the student may develop an awareness for music, may become familiar with music vocabulary and the sound of various musical styles from different cultures, may gain a knowledge of instruments of the orchestra and the lives of various composers, and may learn proper vocal techniques through classroom singing in a non-performance environment. This is done through listening, singing, reading, discussion. The goal of this course is to acquaint the student with sufficient musical knowledge and background to enjoy and understand all musical styles.

### Instrumental Music 7

**8741-8742**

### Instrumental Music 8

**8841 - 8842**

### Instrumental Music 9

**8141- 8145**

Students of all educational levels are invited and encouraged to learn an instrument of their choices. Students will learn the fundamentals of a musical instrument, which will adequately prepare them to participate in ensembles and group performing organizations. Rudiments include tone production, fingering, techniques, rhythm, musicianship, listening, critiquing and the important of music in the lives of the students.

### Orchestra Performance

**8921-8925**

### Chorus Performance

**8941-8945**

### Band Performance

**8951-8955**

These courses offer extended opportunities to musically gifted students to increase their vocal and instrumental abilities by a daily-supervised rehearsal. Techniques of ensemble playing and singing are practiced and discussed at these scheduled rehearsals. Courses also offer advanced preparation and experience for public performance, including participation in high school orchestra, chorus and band activities as well as P.M.E.A. District and Regional Festivals. Materials used in each performance area are geared to pupil ability and enrollment and are selected from P.M.E.A. as well as reputable music periodical graded listings.

### Instrumental Music 10

**8241-8245**

### Instrumental Music 11

**8341-8345**

### Instrumental Music 12

**8441-8445**

**A sequential course of study in which students increase and develop instrumental performance skills individually and in ensemble, with emphasis on accurate interpretation of the music studied. Band and relevant music materials are studied to prepare students for individual performance and membership in Band, Orchestra and small instrumental ensembles. Students should have previous experiences in band or orchestra classes to perform music at the 9<sup>th</sup> to 12<sup>th</sup> grade levels. Consideration will be given to the student's knowledge, performance skills, and motivation for enrollment in the course.**

### Chorus Performance

**8941-8945**

**This course is for all students in grades 9 through 12, who are interested in choral singing, regardless of their musical background or experience. The students are taught the correct techniques for vocal production and the art of choral and part-singing. Students are divided according to their vocal range into soprano, alto, tenor, or bass sections. Students are prepared for a program of concert music, which is presented in public performance each semester. Students with singing ability may audition for participation in the P. M. E. A. Festivals, Songfests and County Chorus.**

### Band Performance

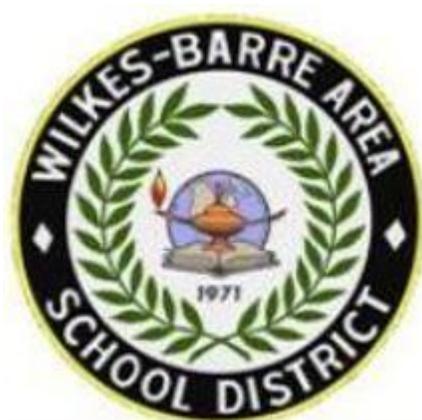
**8951- 8955**

### Orchestra Performance

**8921- 8925**

**A performing class in which students, through studying a widely varied repertory, sequentially and systematically, develop ensemble and solo performance skills. Emphasis is placed on accurate interpretation of the music studied. Performance requirements will be in direct proportion to the number of periods a student may be enrolled in the band course.**

# PHYSICAL EDUCATION DEPARTMENT



## PHYSICAL EDUCATION

The K-12 physical education program is designed so that the student will be exposed to a variety of activities that enhance physical fitness and skill development. During the middle school years, students apply learned skills to team sports and begin to explore recreational and lifelong fitness activities. The student will learn the value of regular physical activity and its contribution to a healthy lifestyle.

7<sup>th</sup> Grade General Physical Education  
**9723**

8<sup>th</sup> Grade General Physical Education  
**9823**

9<sup>th</sup> Grade General Physical Education  
**9123**

10<sup>th</sup> -12<sup>th</sup> Grade General Physical Education  
**9923**

At the high school level, students master previously learned skills and apply advanced strategies to team sports. Students continue to learn how to achieve an improved level of physical fitness and the importance of maintaining an active lifestyle for a lifetime. They are introduced to and exposed to a wide variety of activities, competitive and noncompetitive, that provide enjoyment and promote lifelong health and wellness.

9<sup>th</sup>-12<sup>th</sup> Grade Adaptive Physical Education  
**9950**

This course consists of an individualized program of exercises and activities for those who are recommended for the class by a doctor. Modified sports activities will be presented to improve the student's limiting condition. Emphasis will be placed on weight training, personal fitness development, rehabilitation protocol (when applicable) and individual sports participation. Course difficulty ranges from mild to moderate depending on the student's physical challenge. This course will have an independent schedule per student and will meet a minimum of 72 class period throughout a calendar year. This course must be recommended by a physician.

8<sup>th</sup> Grade Health Education / Nutrition / Wellness  
**9843**

9<sup>th</sup> Grade Health Education / Nutrition / Wellness  
**9143**

These courses provides students with a deeper understanding of age appropriate health issues and focuses on healthy living for all ages. These courses will equip them to better deal with the social and emotional adjustments of middle school. Topics covered include communication skills and healthy relationship building; risk assessment, alcohol, and other drug prevention (including binge drinking); stress and anger management; suicide and self-injury prevention; personal values development; and human sexuality & sexual health.

#### Intro to Wellness / PE Fitness Emphasis

##### **9100**

This course will utilize various movement forms to help students achieve an understanding of the six dimensions of wellness (social, emotional, intellectual, physical, environment, and occupational). In addition, an emphasis will be placed on the role of physical activity in preventing disease and disability. Students will be empowered to make choices, meet challenges and develop positive behaviors in fitness, wellness and movement activity for a lifetime. Emphasis is placed on students developing a personalized fitness program for a healthy lifestyle. Units of instruction include: introduction to kinesiology and physical education with personal fitness emphasis, fitness concepts and techniques, cardiorespiratory endurance training, nutrition, individual activities, and lifetime physical activity choices. This course meets for two days per academic school year and can be chosen as an elective in 9<sup>th</sup> grade.

#### Wellness

##### **9200**

This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Kinesiology and Physical Education program aligned with the Pennsylvania Health and Physical Education Standards. In addition, an emphasis will be placed on the role of exercise science and athletic training principles. The Major areas of study of this course include: Kinesiology Physiology, Strength Training, Personal Fitness Planning, CPR/First Aid, Automatic External Defibrillator (AED) Training, and sports injury care. This course meets for three days per academic school year and can be chosen as an elective in 10<sup>th</sup> -12<sup>th</sup> grades.