Vision Statement
We at Northwood, as a diverse community, aspire to participate productively in a global society, commit fully to high academic achievement, and become models of leadership, strength and success.

Mission Statement
Northwood’s mission is to ensure that ALL students have the opportunity to succeed in a rigorous curriculum, including the completion of a learning experience in a college-level environment.

Northwood High School Staff
www.montgomeryschoolsmd.org/northwoodhs

Principal
Ms. Mildred Charley-Greene

Assistant Principals
Ms. Claudette Smith
Ms. Sara Baudry
Mr. Jacob Lee

Assistant School Administrator
Mr. Delmer Padgett

Academy Coordinator
Ms. Holly Jones

Resource Counselor
Ms. Susan Levine

Resource Teachers
Athletics Director       Mr. Artie Brown
English                  Ms. Miriam Plotinsky
ESOL                     Ms. Kristin Ruopp
Mathematics              Mr. David Lindsey
Science and Technology   Ms. Karen Kraus
Social Studies           Ms. Courtney Osborne
Special Education        Ms. Katharine Scheig
World Languages          Ms. Brandy Reazer

Department Chairs
Physical Education       Mr. Marco Fuggitti
Music, Theatre and Dance Dr. Heidi Temple
Art                      Ms. Eden Reff-Presco
Tech Ed                  Dr. Carlton
For information on:

- Graduation Requirements
- Courses and Credits
- Attendance and Alternative Enrollment
- Grading and Reporting
- Changes in Career and Technology Credits
- College and University Partnerships

Go to the MCPSMD.ORG website and search High School Bulletin.
Academy Programs At Northwood High School

Academies are smaller learning communities within high schools that are designed to help students prepare for higher education and explore possible career pathways. The Academies at Northwood High School focus on community and diversity.

Montgomery College Middle College at Northwood is a program with a bold approach, based on the principle that academic rigor, combined with the opportunity to save time and money, is a powerful motivator for students to work hard and meet serious intellectual challenges. Middle college high schools blend high school and college in a rigorous yet supportive program, compressing the time it takes to complete a high school diploma and the first two years of college. The primary goal of the program is to make college a viable reality for all Northwood students. Montgomery College Middle College at Northwood gives our students the opportunity to earn a Maryland High School Diploma and college credits towards a General Studies associate degree with a choice of three core concentrations: Science, Technology, Engineering and Math (STEM); Humanities, Arts, Communication, and Language (HACL); Social Science, Administration, and Health; or an integrated combination of two cores. This Montgomery College A.A. degree is transferable to a 4-year college within the University of Maryland System.

The Academy of Music, Theatre and Dance (AMTAD) is geared toward students interested in pursuing college and professional careers in the areas of theatre, dance, vocal music, and instrumental music. In either solo or group performances, students will produce, act, and perform in a variety of onstage productions. Coursework within the academy is designed to develop the student through the dance and performing arts pathways with focus on technical production, vocal and instrumental music, dance, and dramatics. Students in all academy strands will be integrally involved in all aspects of production, giving students a solid foundation for advanced preparation within the field. The Dance Pathway gives students a strong background in multiple dance styles such as Jazz, Modern, and Ballet. This pathway also provides opportunities for master classes, field trips and choreographic development. The Performing Arts Pathway gives students a strong background in multiple disciplines. Students in this pathway have the opportunity to take a variety of classes in the performing arts field, such as band, chorus, dance and theatre. Students also have the opportunity to focus solely on one discipline.

The Academy of Politics, Advocacy, and Law (PAL) enables students to deepen their knowledge and understanding of the three branches of government, law enforcement, and civil rights. Students who choose to join this academy select a pathway in either traditional legal studies or Homeland Security. The Legal Studies pathway gives students a strong background in Constitutional Law, Criminal Law, and Civil Law. Students learn how to research, write, and argue cases in all levels of the judicial system. Students have the opportunity to work with members of the Montgomery County Bar Association as well as state and local representatives. The Homeland Security Pathway is designed for students who are interested in pursuing careers or further studies in Homeland Security and Emergency Preparedness. Students pursuing this path will learn methodologies of intelligence gathering and communication, interdependency structures between local, federal and international law enforcement, along with many other practical specialized content. Students who complete this pathway will be given the opportunity to explore leadership opportunities and will also be armed with the knowledge and skills necessary to assume entry-level jobs in this career field.

The Academy of Technological, Environmental and Systems Sciences (TESS) explores concepts in Engineering/Computer Science/Technology and Environmental Sciences. Students who choose to join this academy select a pathway in either Technology/Engineering/Computer Science or in Environmental Sciences. All pathways address the diverse nature of each field by offering students opportunities to expand their vision and develop their abilities while choosing courses that most interest them. The Technology/Engineering/Computer Science Pathway gives students a strong background in engineering, computer programming, robotics, mathematics and physical sciences. This pathway provides opportunities for participating in hacking competitions, coding competitions, internships, and field trips. The Environmental Science Pathway gives students a strong background in both natural and physical sciences, as well as environmental concerns. This pathway also provides opportunities for field studies, internships, field trips, and exposure to guest speakers working in the profession.
The Humanities, Art, and Media Academy (HAM) supports students in their growth as effective communicators and creative artists. Students engage in rigorous academic studies of literature, history, visual art, social sciences, world languages, culture, media, and creative writing. The academy experience culminates with a capstone project that gives each student the opportunity to select a Humanities, Art, or Media topic that will be explored in greater depth, implemented into the school community, and presented as a final project to faculty and students. The Communications Pathway allows students to examine manners in which people connect with each other and convey their ideas to various audiences. The students in this pathway produce publications and presentations that creatively engage with the many voices of the school community. Through the use of speech, media, artwork, design, and written language, students study methods of effective communication. The Visual Arts Pathway provides students with an opportunity to explore art as a viable industry, develop their artistic voice, creativity, and technical abilities. Students receive a wealth of real world experiences as well as explore various mediums from photography, sculpture/ceramics, and studio drawing/painting to digital art, and fashion illustration. Students gain an understanding of art as history, commercialism, and its contemporary use within our society.

The Academy of Finance, Accounting, Marketing and Education (FAME) is geared towards preparing students for advance studies or entry level jobs in career related fields. Students in this academy will be given the opportunity to explore different careers and education pathways, while earning industry/professional certification. Students will also complete Maryland State Department of Education (MSDE) certified pathway courses, some of which are eligible for college credit. All pathways in the academy include a capstone experience such as an internship or a college course. The Business and Marketing pathway provides opportunities for students to sample the functional operations of any business, such as accounting, organization, personnel management, marketing, and social responsibility. The Early Child Development Pathway provides the student with an introduction to methods and materials to assist young children in the learning process. This pathway includes hands-on work with 4-5 year old children while running and organizing a Preschool Lab. The Site Based Work Experience Pathway blends academic, technical and 21st century workplace skills to prepare students for entry level jobs and/or college. All students are exposed to job shadowing, professional conferences, college fairs and networking opportunities with industry experts.

The Academy of Politics, Advocacy, and Law (PAL) enables students to deepen their knowledge and understanding of the three branches of government, law enforcement, and civil rights. Students who choose to join this academy will gain a strong background in Constitutional Law, Criminal Law, and Civil Law. The courses are designed to introduce students to a plethora of career opportunities within the American Judicial System. Students will have the opportunity to work with members of the Montgomery County Bar Association, Montgomery County Police Department, as well as, State and Local Representatives.
ENGLISH

131100/131200 English 9 A/B  English 9 lays the foundation for the detailed analysis and thought argumentation that will be expected of students throughout their high school careers. In Writing and Language 9A, students explore and develop their voices as writers. Approaching literature as apprentice writers, they examine models such as short stories, essays, and novels to expose the choices a writer makes and the effects arising from those choices. They learn to emulate those effects in their own work and practice reflection, revision, and rewriting. In Literature and Language 9B, students hone their critical reading skills by studying texts closely. Through careful reading, students search for understanding and learn to understand diverse interpretations of experience that arise out of a wide variety of perspectives.

131300/131400 English 9, Honors A/B  Same as above

132100/132200 English 10 A/B  Between Writers and Readers: Giving Voice to Ideas focuses on specific genres to help students understand how authors' perceptions of the world drive them to convey their understanding of the human experience. The course includes four units: Stories of the Individual—Memoir and Coming-of-Age Stories; Stories in the Oral Tradition—Drama and Epic Poetry; Stories in the World—Historical and Political Literature; and Stories of Other Worlds—Science Fiction, Fantasy, and Imaginative Literature. Students compose in different modes for different purposes, with opportunities to practice composing in the genres they study.

132300/132400 English 10, Honors A/B  Same as above

133100/133200 English 11 A/B  Rhetoric in a Literate Society includes four thematic units: Examining Argument in Print and Visual Texts, Challenging Truth in Narrative, Questioning Society’s Conscience, and Exploring Individual Ambition and Desire. Each unit is anchored by: a theme, a type of text important to American culture, and a style of discourse. Students read a variety of texts important to the fabric of our nation and develop an understanding of their responsibility as citizens to engage in educated and civil discourse about the issues that confront contemporary society.

133300/133400 English 11, Honors A/B  Same as above

101500/101600 AP English Language and Composition (11th grade) This course is designed for motivated students with a command of standard English and a lively interest in the power and versatility of language. Students read complex prose written in a variety of periods, disciplines, and rhetorical contexts and write for a range of purposes to express ideas with clarity and precision. Students are strongly encouraged to take the AP examination at the end of the course.

114200/114232 College Test Preparation This one-semester course is designed to improve student achievement on both the ACT and the SAT. Students review English and math skills related to the test formats and develop test-taking skills.

134100/134200 English 12 A/B  Global Perspectives in a Changing World encourages students to consider multiple and complex points of view on universal themes and global issues. Students continue to develop skills for using language to understand a world that is changing in terms of how information is produced and shared. The four thematic units of the course focus on world literature, both classic and contemporary, challenging students to study texts from different genres and to discuss why literature continues to matter.
134300/134400 English 12, Honors A/B  Same as above

101700/101800 AP English Literature and Composition, A/B (12th grade) This course is designed for motivated students with a command of standard English and an interest in reading challenging literature, both classical and contemporary and representative of dominant literary genres and themes. Students apply methods of literary analysis and write for a variety of purposes to increase their precision in expression. Students are strongly encouraged to take the AP examination at the end of the course.

114591/114592 Basic Reading A/B Using the READ 180 materials developed by Scholastic Education, this reading intervention program builds literacy skills for selected students. This course may be repeated unlimited times for elective credit.

ESOL

120140/121140 ESOL Level 1 A/B This course is designed to teach English as a new language to ESOL students at the Entering English proficiency level. Reading, writing, listening, and speaking are integrated into thematic, academic units with writing across the curriculum. A general introduction to American culture is provided. This course meets for a double period every day.

121740/121840 ESOL Level 1 Elective A/B This course companion for ESOL Level 1 A/B is designed to continue teaching Entering level ESOL students. Students continue developing listening, speaking, reading and writing skills to facilitate acquisition of English as a new language for social and academic purposes.

120240/121240 ESOL Level 2 A/B This course is designed to teach English as a new language to ESOL students at the Emerging English language proficiency level. Newly acquired oral and written academic vocabulary is incorporated into more complex structures. Students explore themes and concepts across content areas in both literary and expository texts. This course meets for a double period every day.

121940/122040 ESOL Level 2 Elective A/B This companion course for ESOL Level 2 A/B is designed to continue teaching Emerging level ESOL students. Students continue the development of social and academic language.

120340/121340 ESOL Level 3 A/B This course is designed to teach English as a new language to ESOL students at the Developing English language proficiency level. Students review the structures taught at level 1 and 2 with an emphasis on developing fluency, more sustained, complex oral and written communication. Students continue to expand their vocabulary, and acquire greater precision in the use of grammatical forms. Students hone their academic literacy skills for comprehension and effective writing, by reading and responding to narrative and expository text.

122440/122442 ESOL Advanced Communication This companion course for ESOL Level 2 A/B is designed to continue teaching students at the Developing English language proficiency level.

120440/121440 ESOL Level 4 A/B This course is designed to teach English as a new language to ESOL students at the Expanding English language proficiency level. Instruction focuses on the development of linguistic complexity in speaking and writing and advanced listening comprehension. Through expanded reading, students study elements of literary style and analyze various literary and expository texts to improve reading comprehension and interpretation skills.

120540/121540 ESOL Level 5 A/B This course is designed to teach English as a new language to ESOL students at the Bridging English language proficiency level. Students increase their language development and cultural knowledge as they refine strategies for critical analysis by studying texts from a variety of genres and time periods. In their essays, research papers, and discourse, students demonstrate their command of English by analyzing, evaluating, justifying and drawing conclusions about literature and expository text.
113940/114040 Academic Reading A/B (ESOL 1) Using the READ 180 materials developed by Scholastic Education, this reading intervention program builds literacy skills for selected students. This course may be repeated unlimited times for elective credit.

124340/124440 Language of Mathematics A/B (METS 1) This course provides an introduction to math and language concepts for ESOL METS students. English language learners will be able to acquire basic mathematical competencies through developing key vocabulary, critical thinking, mathematical procedures, and real-world applications of math.

124600/124700 US Culture: Past and Present A/B (ESOL 1 & METS) This course is designed to introduce students in the METS (Multidisciplinary Education Training and Support) program to background knowledge and language related to US culture and history as well as develop related skills such as reading content-based social studies text, maps, and graphics. Students explore themes related to the origins of American diversity and identities, cultural traditions, principles of democracy, and the historical development of American society, while building related vocabulary and English language skills that will help prepare them to take the US History course.

114340/114342 Developmental Reading (ESOL 2)

311340/311440 Mathematical Approach to Problem Solving A/B (ESOL) Mathematical Approach to Problem Solving (MAPS) is designed for students who need additional instruction prior to taking Algebra 1. It is primarily for students who have had an interrupted education (e.g., coming to MCPS from out of state or country). Calculators and computers are used in problem-solving situations and in the development of number, algebra, geometry, measurement, probability, and statistics concepts and skills.

ESOL Cultural Dance 9-12 Grades PE Credit (774301/774302) Fine Art Credit (601731/601831)

Cultural Dance explores movement as a creative art form. Student learning includes opportunities to develop kinesthetic awareness, proper body alignment, physical strength, flexibility, endurance, and care of the dance instrument while exploring improvisational and expressive movement and various forms of dance technique. Dance elements and basic principles of composition are studied and practiced. Through the study of dance in various cultures and historical periods, students broaden their understanding of dance as an art form. All students will perform in the Semester Dance Concert.

MATHEMATICS

311100/311200 Algebra 1 A/B Algebra 1 is designed to analyze and model real-world phenomena. Exploration of linear, exponential, and quadratic functions forms the foundation of the course. Key characteristics and representations of functions – graphic, numeric, symbolic, and verbal – are analyzed and compared. Students develop fluency in solving equations and inequalities, one and two variable data sets are interpreted using mathematical models.

320100/320200 Geometry A/B Geometry is studied as a mathematical system through the deductive development of relationships in the plane and space. Students formalize their understanding of geometric concepts, including congruence and similarity, circle chords, secants and tangent segments, parallel and perpendicular lines, angle and side measures in polygons, proofs, logic, transformations, the Pythagorean Theorem, constructions, coordinate geometry, and surface area and volume of solids. Prerequisite: Algebra 1 A/B

320300/320400 Geometry, Honors A/B Same as above

330100/330200 Algebra 2 A/B Algebra 2 is the study of the complex number system and functions. Real-world problems are discussed, represented, and solved using advanced algebraic techniques incorporating technology. The properties and algebra of functions, including polynomial, exponential, logarithmic, piece-wise, radical, and rational, are analyzed and applied, as well as conics, matrices, systems of equations, sequences, and series. Prerequisite: Algebra 1 and Geometry)
331000/331100 Algebra 2, Honors A/B Same as above Prerequisite: Algebra 1 and Geometry

331500/331600 Algebra 2 A/B  131700/131800 C/D 2 year Two-year Algebra 2 is intended to provide access to Algebra 2 content for more students, to raise the level and consistency of expectations for students who previously would have been enrolled in remedial courses including Bridge to Algebra 2, and to eliminate the need for remedial courses that do not lead to College and Career Readiness in mathematics. Two-year Algebra 2 includes opportunities to support students as they develop and demonstrate this consistent level of understanding. Content of two-year Algebra 2 offers appropriate adaptations, purposeful scaffolding that is reduced over time, and additional transitional opportunities to help students in need of additional support or time to access the same rigorous Algebra 2 standards over two years.

348900/349000 Precalculus A/B Precalculus completes the formal study of the elementary functions begun in Algebra 1 and Algebra 2. Students focus on the use of technology, modeling, and problem solving. Functions studied include polynomial, exponential, logarithmic, rational, radical, piece-wise, and trigonometric and circular functions and their inverses. Parametric equations, vectors, and infinite sequences and series are also studied. Prerequisite: Algebra 2

335000/335100 Precalculus, Honors A/B Same as above Prerequisite: Algebra 2

312100/312200 Quantitative Literacy A/B Quantitative Literacy is designed to enhance students’ abilities in mathematical decision making and financial literacy. Emphasis is on the mathematical aspects of savings and investments, loans and credit, budgeting, chance, decision making, and starting a business. Prerequisite: Algebra 2 or Bridge to Algebra 2

332200/332300 Statistics and Mathematical Modeling A/B Statistics and Mathematical Modeling (SAMM) semester A topics include data analysis, probability, simulations, inferential statistics, normal and binomial distributions, techniques of sampling, confidence intervals, and hypotheses testing. Semester B topics are chosen from cryptography and coding, game and graph theory, architecture, trigonometry, fairness and apportionment, careers, investment and finance, and college placement test review. Prerequisite: Algebra 2

335600/335700 Calculus with Applications A/B Calculus with Applications topics include limits, continuity, and derivatives of functions, the definite integral, and their real-world applications. Students find and apply derivatives numerically, graphically, and symbolically. Previously studied functions will be analyzed using calculus concepts. The relationship between the derivative and the definite integral is developed. Students will model real-world situations involving rates of change using difference or differential equations. Prerequisite: Precalculus

3345200/345300 Calculus AB, Advanced Placement, A/B Calculus AB topics are those traditionally offered in the first year of calculus in college, and are designed for students who wish to obtain a semester of advanced placement in college. The topics studied include limits, continuity, derivatives and integrals of algebraic and transcendental functions and their applications, and elementary differential equations. Prerequisite: Precalculus or Calculus with Applications

349100/349200 Calculus BC, Advanced Placement, A/B Calculus BC includes all of the topics in Calculus AB, as well as convergence tests for series, Taylor or Maclaurin series, vector, polar, and parametric functions. Students in BC Calculus may receive two semesters of Advanced Placement in mathematics. Prerequisite: Precalculus, Honors

332000/332100 Statistics, Advanced Placement, A/B Advanced Placement Statistics students engage in the exploratory analysis of data, using graphical and numerical techniques. Data sets are collected using statistical design methods. Students produce appropriate models using probability, simulation, and statistical inference. Models are used to draw conclusions from data and analyzed by inferential methods to determine whether the data support or discredit the model. This course is equivalent to a non-calculus-based introductory college statistics course. Prerequisite: Algebra 2
**Multivariable Calculus and Differential Equations**
This highly advanced course includes extensive work with vector analysis, partial derivatives, multiple integrals, and line integrals. Students will also complete collaborative projects that incorporate these concepts. Differential equations are introduced.

**SCIENCE**

**363100/36200 Biology A/B (TESS Academy, Environmental Pathway)**
**362100/362200 Honors Biology A/B (TESS Academy, Environmental Pathway)**
This NGSS aligned course emphasizes the patterns, processes, and relationships of living organisms. Students will use observations, experiments, hypotheses, tests, models, theory, and technology to explore how life works. Core ideas include structures and processes in organisms, ecology, heredity, and evolution. There will be multiple opportunities for students to apply these ideas in developing solutions to authentic problem-based scenarios while also exploring career opportunities.
Course designed for freshmen and sophomores
Fulfills the biology graduation requirement

**382100/382200 Honors Physics A/B (TESS Academy, Technological Pathway)**
This NGSS aligned course investigates physical laws and theories, relationships of physical phenomena, and the interrelationships of physics to other fields of human endeavor. Topics include traditional physics subjects (Newtonian mechanics: dynamics, momentum, energy; electricity and magnetism; waves) along with related subjects in earth science (plate tectonics; earthquake activity) and astronomy (solar evolution).
Corequisite: Geometry A/B
Course designed for freshmen or juniors/seniors
Fulfills the physical science graduation requirement

**372100/372200 Chemistry A/B**
**371100/371200 Honors Chemistry A/B**
This NGSS aligned course emphasizes the study of matter through inquiry. Through the use of laboratory investigations, students will explore their world at the atomic level. Using data, evidence, and scientific modelling, students achieve a deeper understanding of changes in matter. Topics of study will include structures and properties of matter, weather and climate, chemical reactions, conservation of mass/energy, and relationships between Earth and human activity.
Prerequisite: Algebra 1 Corequisite: Geometry A/B
Course designed for sophomores, juniors or seniors with the required math and who are taking or have taken biology
Fulfills the physical science graduation requirement

**357700 Honors Geoscience Explorations: Earth Systems and Hazards** (1 Semester) (TESS Academy, Environmental Pathway)
This course investigates Earth systems and hazards in the context of human activity. Students will work collaboratively to develop solutions to scientific problems. The honors option provides opportunities for extended lab investigations, citizen science, research, and literature review.
Course designed for juniors or seniors
Fulfills the physical science graduation requirement

**357900 Honors Geoscience Explorations: Resources & Paleontology** (1 Semester) (TESS Academy, Environmental Pathway)
This course investigates Earth systems and resources in the context of Earth’s place in the universe. Students will work collaboratively to develop solutions to scientific problems. The honors option provides opportunities for extended lab investigations, citizen science, research, and literature review.
Course designed for juniors or seniors
Fulfills the physical science graduation requirement
365500 Wildlife Biology (1 Semester) (TESS Academy, Environmental Pathway)
This introductory course for students interested in wildlife management or zoology includes field study techniques and information about careers in areas of animal science. Topics include statistical tests, wildlife management habitat usage, foraging preference, behaviors, and body morphology to identify organisms. Soil chemical properties and water quality are used to determine the viability of vertebrates and aquatic macroinvertebrates.
Prerequisite: Biology A/B
Course designed for juniors or seniors

365700/365800 Molecular Biology A/B (Honors level, PAL Academy course)
These courses stress the concepts, theories, and techniques of molecular biology, classical genetics, modern genetics, DNA technology, and bioethics. Laboratory investigations parallel those in a scientific research laboratory. These advanced-level courses prepare students for an internship at a scientific research facility.
Prerequisite: Biology A/B  Corequisite: Chemistry A/B
Course designed for juniors or seniors

Fulfills the biology graduation requirement

367100/367200 Horticultural Science A/B (TESS Academy, Environmental Pathway)
Horticultural Science is designed for students interested in mastering fundamental techniques in the care and culture of plants in the home, business, and community. Topics include plant anatomy and physiology; growth conditions; plant propagation; control of disease, weeds, and pests; greenhouse management; plant identification; soils; lawns; and landscaping. Either semester can precede the other.
Course designed for juniors or seniors

376100/376200 Anatomy and Physiology A/B (Honors level course)
This course is a study of the major systems of the human body. Career opportunities in medical-related fields are examined. The course is intended for advanced-level students. Anatomy and Physiology A topics include cells, tissues, and systems (skeletal, muscular, integumentary, and nervous). Anatomy and Physiology B topics include digestive, respiratory, circulatory, excretory, endocrine, and reproductive systems. Dissection is required.
Prerequisite: Biology A/B  Corequisite: Chemistry A/B
Course designed for juniors or seniors

Fulfills the biology graduation requirement

385600/385700 Astronomy A/B (TESS Academy, Technological Pathway)
Astronomy offers an in-depth look into the cosmos, integrating the disciplines of biology, chemistry, earth science, and physics. Students learn about the Universe through experiences in the laboratory and sites beyond the classroom such as NASA and the Air and Space Museum. Course content constantly evolves with new discoveries. Students may enroll in either semester and in any order.
Course designed for juniors or seniors

Fulfills the physical science graduation requirement

386400/386500 Forensic Science A/B (Honors level, PAL Academy course)
Students study forensic science and modern criminal investigation analysis. The course includes selected topics in: structure and function of the human body, toxicology, drug and alcohol abuse, serology, terrorist and disaster response and emergency medical procedures, ballistics, DNA analysis, fingerprint interpretation, and explosive incident and arson investigation.
Prerequisite: Biology A/B and either Chemistry A/B or Physics A/B
Course designed for juniors or seniors
Advanced Placement Environmental Science A/B (TESS Academy, Environmental Pathway)

AP Environmental Science is for highly motivated students with interest in interdisciplinary science. It builds on concepts covered in Environmental Science, with greater detail in content and laboratory investigations. Students are prepared to take the Advanced Placement Environmental Science examination. Topics include the interrelationships of the natural world and environmental problems, issues, and solutions.

Prerequisite: Biology A/B    Corequisite: Chemistry A/B

Course designed for juniors or seniors

Advanced Placement Chemistry A/B (Double period) (TESS Academy, Both Pathways)

AP Chemistry is for highly motivated students with interest in the physical sciences. AP Chemistry builds on concepts covered in chemistry with greater detail in content and laboratory investigations. Students are prepared to take the Advanced Placement Chemistry examination at the end of the course. Topics include the structure and properties of matter, chemical reactions, kinetics, thermodynamics, equilibrium, and science practices.

Prerequisite: Chemistry A/B and Algebra 2 A/B

Course designed for juniors or seniors

Fulfills the physical science graduation requirement

Advanced Placement Biology A/B (Double period) (TESS Academy, Environmental Pathway)

AP Biology is for highly motivated students with interest in biology. The course emphasizes laboratory investigations and builds on the concepts covered in Biology. Students prepare to take the Advanced Placement Biology examination at the end of the course. Topics in AP Biology include chemistry of life, cytology, cellular energetics, genetics, diversity of life, evolution, ecology, and behavior. Dissections may occur in this course.

Prerequisite: Biology A/B     Corequisite: Chemistry A/B

Course designed for juniors or seniors

Fulfills the biology graduation requirement

Advanced Placement Physics 1 A/B (TESS Academy, Technological Pathway)

This NGSS aligned course is for highly motivated students with an interest in the physical sciences and builds on concepts covered in Physics with greater detail in content and laboratory investigations. Students explore Newtonian mechanics, including rotational dynamics and angular momentum; work, energy, and power; and mechanical waves and sound. Electric circuits will be introduced.

Prerequisite: Geometry A/B     Corequisite : Algebra 2 A/B

Course designed for juniors or seniors; freshmen with math prerequisite may also elect to take it

Fulfills the physical science graduation requirement

Advanced Placement Physics 2 A/B (TESS Academy, Technological Pathway)

This NGSS aligned course is for highly motivated students with an interest in the physical sciences and builds on concepts covered in Physics 1 with greater detail in content and laboratory investigations. Students explore fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics.

Prerequisite: Algebra 2 A/B, AP Physics 1 A/B     Corequisite : Pre-Calculus A/B

Course designed for juniors or seniors

Fulfills the physical science graduation requirement
TECHNOLOGY & COMPUTER SCIENCE

516100/516200 Foundations of Technology A/B (TESS Academy, Technological Pathway)
Students will explore and develop a deep understanding of the characteristics and scope of technology and the influence on history, along with the relationships and connections between technology and other fields of study. Students will develop an understanding of the attributes of design and develop skills by using the design process to solve technological problems. Students will develop a positive attitude about safety and skills through research, problem solving, testing, and working collaboratively.

Fulfills the technology education graduation requirement

280800/280900 Advanced Design Applications A/B (TESS Academy, Technological Pathway)
Students will gain a deeper understanding of four human-designed world areas: Manufacturing Technologies, Energy and Power Technologies, Construction Technologies, and Transportation Technologies. Students engage in individual and group activities creating ideas; developing innovations; and designing, fabricating, and engineering practical solutions to a variety of technological problems related to the four human-designed areas.
Prerequisite: Foundations of Technology A/B or Foundations of Computer Science
Fulfills the advanced technology education graduation requirement

281000/281100 Advanced Technological Applications A/B (TESS Academy, Technological Pathway)
This standards-based, technological design course provides students the opportunity to build on their existing technological literacy through a deeper understanding of Information and Communication Technologies, Medical Technologies, Agriculture and Related Biotechnologies, and Entertainment and Recreation Technologies. Students work individually and in groups to create ideas, develop innovations, design solutions, fabricate models, and engineer practical design results in a variety of technological problems.
Prerequisite: Foundations of Technology A/B or Foundations of Computer Science
Fulfills the advanced technology education graduation requirement

292200/292300 Foundations of Computer Science A/B (Computer Science Program of Study code)
291600/291700 Foundations of Computer Science A/B (TESS Academy, Technological Pathway code)
Foundations of Computer Science is designed to introduce students to the breadth of the field of computer science through an exploration of engaging and accessible topics. Rather than focusing the entire course on learning particular software tools or programming languages, the course is designed to focus on the conceptual ideas of computing and help students understand why certain tools or languages might be utilized to solve particular problems. The goal of Foundations of Computer Science is to develop in students the computational practices of algorithm development, problem solving and programming with the context of problems that are relevant to the lives of today’s students. Students will also be introduced to topics such as interface design, limits of computers and societal and ethical issues.

A course for the computer science program of study (292200/292300)
Fulfills the technology education graduation requirement (291600/291700)

292400/292500 AP Computer Science Principles A/B (Computer Science Program of Study code)
291800/291900 AP Computer Science Principles A/B (TESS Academy, Technological Pathway code)
This course, offered in partnership with Code.org, advances student understanding of the central ideas of computer science, engaging students in activities that show how computing changes the world. Through a focus on creativity, students explore technology as a means for solving computational problems, examining computer science’s relevance to and impact on the world today. Aligned to the AP test of the same name, this course is part of an MSDE-approved 4-credit Program of Studies in Computer Science.

A course for the computer science program of study (292400/292500)
Fulfills the technology education graduation requirement (291800/291900)
290100/290200 AP Computer Science Java A/B (Computer Science Program of Study)
Using the Java language, students explore in-depth work with text files and arrays, abstract data types, recursion, searching and sorting algorithms, and program efficiency. Examination of specified class behaviors, interrelated objects, and object hierarchies are studied. Students may elect to take the A version of the AP Computer Science exam upon completion of this course.

A course for the computer science program of study

296500/296600 Computer Programming 3 – Advanced Topics in Computer Science A/B (Computer Science Program of Study)
Students will study advanced programming methodology, the features of programming languages, primitive data types, dynamic allocation of memory, data structures, searching, sorting, and numerical algorithms, using the Java programming language. Students are also introduced to software engineering concepts and team-oriented approaches for solving problems. Students will explore advanced topics such as memory management, network programming, simulation and game development, and multimedia programming.

A concluding course for the computer science program of study

781300/781600 Internship A/B (Computer Science Program of Study)
781800/781900 Internship DP A/B (Double Period) (Computer Science Program of Study)
782200/782300 Internship TP A/B (Triple Period) (Computer Science Program of Study)

A concluding course for the computer science program of study
Social Studies

211000/211200 History, United States A/B  This course is a continuation of eighth grade U.S. history. Semester A is a survey in four areas—the movement out west; effects of Industrial Revolution and immigration; United States in world affairs through World War I; and major developments of the 1920s and 1930s. Semester B is a survey of four areas of U.S. history—World War II and its impact; domestic policies 1945-1970; the impact of the cold war; and cultural change in post-war America. This course is required for graduation.

211100/211300 History, United States, Honors A/B  Same as above

211400/212400 History, United States, Advanced Placement A/B  This course is for students desiring a freshman college-level course in United States history. The course is a survey of this nation's history from 1491 to the present, using a college-level text and requiring college-level writing and discussion. AP U.S. History A/B satisfies the graduation requirement of a year in U.S. History.

106000/106032 Literacy in the Digital Age (AP companion)

210700/210800 Government - National, State, and Local (NSL) A/B  Students learn the purposes, structure, functions, and workings of government; change processes that keep American governments workable; and principles of foreign policy and application to contemporary situations. In Semester B, students learn rights and responsibilities of citizens; economic principles, fiscal/monetary policy of the United States, the role of government in making public policy in areas such as environment, health, and equity; and financial literacy. This course satisfies the NSL Government graduation requirement.

212700/212800 Government - National, State, and Local (NSL) Honors A/B  Same as above

210400/210500 Advanced Placement U.S. Government and Politics A/B  This college-level course helps students develop greater understanding of American government. In addition to skills development, the course focuses on the U.S. Constitution, policymakers Institutions, civil rights and liberties, and public policy. Advanced Placement United States Government and Politics with NSL may be used to satisfy the graduation requirement for National, State and Local Government A and B.

222100/222200 History, Modern World A/B  Throughout the course students examine past world history and draw connections to similar concepts and forces at work today. Students will build an understanding of the complexity of our global relationships. Concept-based instruction, a comparative case study approach, and historical thinking skills are used to frame world history from the 15th century to today. This course is required for graduation.

222300/222400 History, Modern World Honors A/B  Same as above

224000/224100 History, World, Advanced Placement A/B  This college-level course helps students develop greater understanding of world history and human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The chronological time frame is from 8000 BCE to the present. AP World History A/B satisfies the graduation requirement of a year in Modern World History.
234700 Global Issues in the 21st Century (1 semester) Students use media resources that relate to intercultural and international topics to learn about the diversity, complexity and interdependence of the world community. This provides the necessary background to analyze the political, economic, social and cultural aspects of current world problems and issues in relation to the policies of the American government. The course helps students make connections to our global society.

230500/231400 Sociology 1,2 Sociology 1 is concerned with human groups and factors that unite or divide them, including culture, values, social groups, social stratification, population, the family, socialization, propaganda, and social institutions. Focus is on the impact of change on mores, norms, and customs and relation to current social events. In Sociology 2, emphasis is placed on the application of the basic concepts of social change to American institutions.

220900 Medieval History (1 Semester) European history from the fall of Rome through the crises that characterized the late Middle Ages is surveyed. Topics include the rise of Christianity and Islam and the conflict between those religious forces, the characteristics of medieval European society, and crises such as the Black Plague that ended this period.

232000 Comparative Religions (1 Semester) This course provides a survey of the basic elements and historical development of world religions. Students study primitive religions, the sociology of religion, and comparisons of the religions of India, China, and the Near East, Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism, Taoism, and Zoroastrianism.

233000/233100 Psychology, Advanced Placement A/B This college-level course prepares students for the AP exam. Students scientifically study behavior and investigate the psychological domains—methods of research, biopsychology, cognitive processes, lifespan development, and sociocultural dimensions of behavior, thinking and language, states of consciousness, individual differences, personality and assessment, and psychological disorders and their treatment.

233200/233300 Human Geography, Advanced Placement A/B This college-level course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. Students employ spatial concepts and landscape analysis to analyze human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice.

221600/221700 History, European, Advanced Placement A/B This college-level course is a survey in European history from the 15th century to the present. A college-level text is used, and students engage in college-level writing and discussion. This course prepares students for the AP European History examination.

224800 Women’s Studies (1 Semester) Throughout the course, students will analyze the social, political, economic, and legal status of women. Students will examine issues of women with regards to nationality and ethnicity and socioeconomic class. The course will interweave the historical context of topics such as women’s health, “women’s work”, women’s rights, and images of women in the media. Learnings will be based on oral histories, literature, film, primary source documents, academic journals and other forms of mass media including music videos, print and television advertisements, and news articles. The course will be student centered and culminate in a project based learning.
220400 Latin American History  This course provides an overview of the cultural background and historical development of the nations of Latin America, their role in the world today, and their future. Problems of population distribution, cultural and economic influences and ownership, and political and social change are studied.

210300/210332 History, African American A/B  This course is a survey of the individuals, forces, and events that make up the experiences of African Americans in the United States. Emphasis is given to the impact of major events in our history on African Americans.

WORLD LANGUAGES

171100/172100 Spanish 1 A/B  Students begin to learn to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret basic information when listening and reading. Vocabulary and basic grammatical structures are taught within the context of these familiar topics. Culture is embedded throughout the course.

171200/172200 Spanish 2 A/B  Students expand their ability to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret information when listening and reading. Vocabulary and grammatical structures are taught within the context of these topics. Culture is embedded throughout the course.

171300/172300 Spanish 3 A/B  Students continue to expand their ability to communicate orally and in writing in a culturally appropriate manner about a variety of familiar topics. They interpret detailed information when listening and reading. Vocabulary and more complex grammatical structures are taught within the context of these topics. Culture is embedded throughout the course.

173300/174300 Spanish 3, Honors A/B  Students continue to expand their ability to communicate orally and in writing in a culturally appropriate manner about a variety of familiar topics. They interpret detailed information when listening and reading. Vocabulary and more complex grammatical structures are taught within the context of these topics. Culture is embedded throughout the course.

173400/174400 Spanish 4, Honors A/B  Students communicate orally and in writing with increased proficiency in a culturally appropriate manner about a range of topics. They interpret detailed and extended information when listening and reading. Vocabulary and complex linguistic structures are taught within the context of these topics. Culture is embedded throughout the course.

171500/172500 Spanish 5 A/B  Students continue to increase their proficiency in communicating orally and in writing in a culturally appropriate manner about a broad range of topics. They interpret complex information when listening and reading. Vocabulary and a variety of complex linguistic structures are taught within the context of these topics. Culture is embedded throughout the course.

175900/176000 AP Spanish Language, A/B  This course is for world languages students interested in college-level work. Students concentrate on developing proficiency in speaking, listening, reading, and writing in preparation for the Advanced Placement language examination. This course emphasizes mastery of linguistic competencies at a very high level of proficiency.
176100/176200 AP Spanish Literature A/B  This course is for world languages students interested in college-level work. A selection of challenging literature and materials helps students deepen their understanding of how literature communicates meaning through form and content. Students read, discuss, and react to representative works of a range of literary genres and themes in preparation for the Advanced Placement examination.

161100/162100 French 1 A/B  Students begin to learn to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret basic information when listening and reading. Vocabulary and basic grammatical structures are taught within the context of familiar topics. Culture is embedded throughout the course.

161200/162200 French 2 A/B  Students expand their ability to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret information when listening and reading. Vocabulary and grammatical structures are taught within the context of these topics. Culture is embedded throughout the course.

163300/164300 French 3, Honors A/B  Students continue to expand their ability to communicate orally and in writing in a culturally appropriate manner about a variety of familiar topics. They interpret detailed information when listening and reading. Vocabulary and more complex grammatical structures are taught within the context of these topics. Culture is embedded throughout the course.

163400/164400 French 4, Honors A/B  Students communicate orally and in writing with increased proficiency in a culturally appropriate manner about a range of topics. They interpret detailed and extended information when listening and reading. Vocabulary and complex linguistic structures are taught within the context of these topics. Culture is embedded throughout the course.

161500/162500 French 5 A/B  Students continue to increase their proficiency in communicating orally and in writing in a culturally appropriate manner about a broad range of topics. They interpret complex information when listening and reading. Vocabulary and a variety of complex linguistic structures are taught within the context of these topics. Culture is embedded throughout the course.

161600/162600 French 6 A/B  Students communicate at a high level of proficiency orally and in writing in a culturally appropriate manner about a broad range of topics. They interpret complex information when listening and reading. Vocabulary and a variety of complex linguistic structures are taught within the context of these topics. Culture is embedded throughout the course.

163500/163600 French Language and Culture, Advanced Placement A/B  This course is for world languages students interested in college-level work. The course links language and culture while developing students' proficiency in speaking, listening, reading, and writing. Students read, discuss, and react to a variety of texts orally and in writing in preparation for the Advanced Placement examination.

187100/187200 Chinese 1 A/B  Students begin to learn to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret basic information when listening and reading. Vocabulary and basic grammatical structures are taught within the context of these familiar topics. Culture is embedded throughout the course.

187300/187400 Chinese 2 A/B  Students expand their ability to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret information when listening and reading. Vocabulary and grammatical structures are taught within the context of these topics. Culture is embedded throughout the course.
187500/187600 Chinese 3A/B Students continue to expand their ability to communicate orally and in writing in a culturally appropriate manner about a variety of familiar topics. They interpret detailed information when listening and reading. Vocabulary and more complex grammatical structures are taught within the context of these topics. Culture is embedded throughout the course. Chinese 3 A focuses on student environment (house, past time, and weather). Chinese 3B focuses on learning how to communicate about community, transportation, and travel.

177700/177800 Spanish for Spanish Speakers 1 A/B
Spanish for Spanish Speakers provides language instruction for students with proficiency in Spanish, either because it is their first language or is spoken extensively in the home. Each course integrates history, culture, language, and connections related to the Spanish-speaking world. Topics include biographies, conjugate verbs (ser, ir, dar, estar, and tener), examining ethnic groups, using proper gender rules for people and objects, and culture and traditions of families.

177900/178000 Spanish for Spanish Speakers 2 A/B
Spanish for Spanish Speakers provides language instruction for students with proficiency in Spanish, either because it is their first language or is spoken extensively in the home. Each course integrates history, culture, language, and connections related to the Spanish-speaking world. Topics include the history of Latin American culture, the influence of geography on Latin American life, changes in communication over time, comparisons or cities and urban areas, grammar focuses on use of the irregular preterit verb tense and use of past, present, and future verb tenses, sentence structures, and expressing how something happens.

178100/178200 Spanish for Spanish Speakers 3A/B
Spanish for Spanish Speakers provides language instruction for students with proficiency in Spanish, either because it is their first language or is spoken extensively in the home. Each course integrates history, culture, language, and connections related to the Spanish-speaking world. Topics include comparing country versus city life, food culture, native foods in Latin America, driving a car, writing using terms to compare and contrast, services and government, police, grammar topics the focus on proper placement of pronouns, sentence structures, uses of pronouns based on Latin American regions, and being able to write in complete sentences.

158900/159000 Arabic 1 A/B
Students begin to learn to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret basic information when listening and reading. Vocabulary and basic grammatical structures are taught within the context of these familiar topics. Culture is embedded throughout the course. Themes and topics include: classes and friends, personal life (family), pastimes and the weather, food preferences, and communicating about clothing and home life.
VISUAL ARTS

605500/605600 Foundations of Art, A/B Students create artworks that convey personal meaning using a variety of production processes, including drawing, painting, crafts, commercial art, printmaking, and sculpture. Historically significant examples of each art form, representing a variety of cultures, are investigated and represented in the creative production process. Students develop a context for understanding art as an aspect of human experience. Prerequisite: 6055 Foundations of Art A is required before 6056 Foundations of Art B

649600/649700 Digital Art 1 A/B Students use the computer as a tool to create portraits, illustrations, commercial/advertising art, and animations. Students discuss ethical and safety issues in the use of computers as an instructional tool. A variety of techniques, processes, and applications are studied. Guest speakers and experts in the field of digital art introduce and describe careers. Students work to develop criteria for judgment of digital artwork. A portfolio of digital art is produced. (NO REPEATS)

649800/649900 Digital Art 2 A/B Students continue to create original artwork using the computer as the tool. Visual and technical literacy is developed through critical and creative thinking in order to solve artistic problems. This course can be repeated for credit. Prerequisite: Digital Art 1 A/B

645400/645500 Art and Culture Students study the visual designs found in our environment, focusing on cultural influences and social significance. They analyze and discuss architecture, crafts, decorative arts, environmental designs, communication arts, design in commerce and industry, and fine art. Studio projects and textbook assignments are given. The role of art in society and the contributions of minority artists are among the topics studied.

610500/610600 Studio Art 1 A/B Students continue their study of art, applying their knowledge of media, tools, techniques, and the elements of art and principles of design to original artwork. Many art forms are studied, including drawing, painting, printmaking, and sculpture. Students study art from other cultures, regions, and time periods, and how both historical and contemporary artwork is used to inspire original work. Career information is provided. Prerequisite: Foundations of Art A/B

620500/620600 Studio Art 2 A/B Students continue building a portfolio of artwork and an art journal. Personal style emerges through the selection of media, subject matter and art forms used to solve visual problems. Reading assignments, group critiques, and visuals are used to help students develop an aesthetic vocabulary and an appreciation for art as an expression of human experience. Prerequisite: Studio Art 1 A/B

630500/630600 Studio Art 3 A/B Students focus on a medium and art form of their choice, using both assigned and self-selected subject matter. They participate in group critiques and present their work in a portfolio and in a one-person show. They participate in group discussions in which they analyze significant works of art and periods of art history. Museum field trips and talks with visiting artists may be arranged. Prerequisite: Studio Art 2 A/B

638100/639100 Ceramics/Sculpture 1 A/B Students learn basic hand-building techniques and glazing processes. Included are the composition and general characteristics of clay bodies, safe studio practices, craftsmanship, and surveys of significant styles in pottery and ceramic sculpture. An introduction to the wheel may be presented. Ceramics 1B focuses on sculptural processes using a variety of materials and techniques. Writing and thinking skills are reinforced through journal writing. Prerequisite: 6381 Ceramics/Sculpture 1A is required before 6391
638300/639300 Ceramics/Sculpture 2 A/B  Students create original artwork inspired by natural and historically significant ceramic forms. Students study the formulation and firing characteristics of basic glazes, additional techniques for throwing on the pottery wheel, kiln theory, craftsmanship and safe studio practices. Students apply decoration techniques such as using over-glazes, underglazes, and patina methods and learn to stack and monitor the kiln. **Prerequisite: Ceramics/Sculpture 1 A/B**

638500/638600 Ceramics/Sculpture 3 A/B  Students study the works of contemporary potters and sculptors in terms of form, finish, and conceptual statement. Students create a series of forms that reflect a common source or theme. They combine hand-made and wheel-thrown clay forms to create pottery or sculpture that reflects personal meaning. Writing and thinking skills are reinforced through journaling. Group critiques are conducted. Health hazards are reviewed. **Prerequisite: Ceramics/Sculpture 2 A/B**

634300/634400 Digital Photography A/B  This course provides students with a basic understanding of digital photography as an art form. A digital camera and computer software replaces the traditional darkroom and is used to capture and manipulate photographic images, and to increase the student's understanding of both traditional and contemporary photographic techniques. Photographic composition and the expression of meaning in personal artworks will be stressed. The students will create portfolios of their digital photographs that emulate both traditional and contemporary photographic processes and media. 11-12   **(NO REPEATS)**

634500/634600 Photography 1 A/B  Students develop skills in using an SLR camera, processing film, and printing black-and-white photographs. The elements of art and design principles are studied and applied to photographic compositions. Contemporary photographic technology is demonstrated and used where available. Safe darkroom practices are learned, and opportunities to exhibit work are presented. Writing and thinking skills are reinforced through journaling. **Prerequisite: 6345 is prerequisite for 6346**

634700/634800 Photography 2 A/B  Students create a portfolio of photographic work using various production techniques, including advanced camera and darkroom practices, and digital technology. Students continue studies in the history of photography and apply historical or stylistic qualities to their work. Composition and aesthetic criteria are stressed. Writing and thinking skills are reinforced through journaling. Students participate in critiques, and mat and display their work for exhibit. **Prerequisite: Photography 1 A/B**

631300/631600 Introduction to Fashion Illustration & Production  Advanced Studio A/B  This course is designed to expand opportunities for students to participate in a signature program at Northwood. This class will focus on illustrating, marketing, and promoting fashion. This course will operate to prepare students for college and career programs in fashion design. Students investigate historically examples of fashion representing a variety of cultures in the creative illustrative production process. **Prerequisite: Foundations of Art**

648600/648700 AP Studio Art 2-D.  This individualized program focuses on art projects that demonstrate the competencies expected of Advanced Placement art applicants, as identified by the College Board. Students assemble portfolios to meet the submission requirements for the AP Exam. This course may be repeated once for credit. **Prerequisite: Foundations of Art A/B or and Studio Art 1 A/B   **(BY RECOMMENDATION)
**MUSIC COURSES**

681100/688500 **Beginning Band, Percussion Ensemble A/B**  
Beginning Band is for students with no instrumental music experience. The primary emphasis of this class is in developing the ability to play a variety of percussion instruments. Areas such as elements of musical form, terms and symbols, and the importance of practice habits are presented. The development of skills necessary to perform Grades I and II music and prepare students for a high school band course is stressed. Public performances outside of the school day may be required to meet course objectives.

682100/682200 **Concert Band, A/B**  
Students will develop and refine the skills that will enable them to perform music at the Grade III level of difficulty. Basic transposition, melodic dictation, and triad development are included. Written projects may include music history, performance critiques, and musical composition. Public performances outside of the school day may be required to meet course objectives. A second year of Advanced Band may be substituted for the first year of Concert Band. This course may be repeated once for credit.  
**Prerequisite:** Advanced Band or by audition, and the need to balance instrumentation as determined by the director.

682600/682700 **Symphonic Band, A/B**  
Students develop skills that will enable them to perform music at the Grade IV to VI level of difficulty. The emphasis will be on the study of literature composed originally for the band/orchestra during the 20th and 21st centuries. Additional experiences may include marching band, pep band, improvisation, and chamber and solo performance. Public performances during and after school may be required to meet course objectives. This course may be repeated for credit.  
**Prerequisite:** Concert Band or by audition, and the need to balance instrumentation as determined by the director.

687100/687200 **Jazz Ensemble A/B**  
Students develop a high level of skill in the performance of jazz, blues, jazz-rock, soul, and other styles of music. They extend their skills and study of jazz interpretation and improvisation, jazz harmony and theory, and the historical influences on jazz as it developed into an American art form. Public performances during and after school may be required to meet course objectives. This course may be repeated for credit.  
**Prerequisite:** Concert Band or Concert Orchestra or audition, and the need to balance instrumentation

656500/656600 **Music Perspectives A/B**  
Students analyze and discuss jazz, folk, popular, and classical music representing a variety of eras and cultures. Through listening, performing, and composing, students learn about music notation, form, and style. They examine the art of performance from the perspective of the audience, the performer, and the critic. Attendance at live performances is encouraged.

654500/654600 **Music Theory and Composition A/B**  
Students study the elements of music, with emphasis on music terminology, notation, and major and minor keys. They practice melodic, rhythmic, and harmonic dictation; keyboard harmony and sight-singing; and learn how to compose music in different styles for various combinations of voices and instruments.

652000/652100 **Piano 1 A/B**  
Students learn to read music and acquire standard piano technique. This course is open to all students, regardless of musical background. Students develop effective practice habits and perform selections of gradually increasing difficulty as they progress independently. They listen to and analyze examples of excellent piano performance.
**653500/653600 Piano 2 A/B**  Students study and perform a wide variety of intermediate and advanced repertoire. They improvise, compose, and arrange music in a variety of styles. Students refine their understandings of music history through analysis of repertoire. This course may be repeated for credit. **Prerequisite: Piano 1 A/B**

**658500/658600 Guitar 1 A/B**  Students learn beginning guitar technique, including selected major, minor, and seventh chords; basic finger picks and strums; and tuning technique. Music theory and historical perspective are studied as they relate to guitar performance. This course is open to all students, regardless of music background. The technological aspects of contemporary guitar playing are studied.

**659100/659200 Guitar 2 A/B**  Students with a high level of interest, ability, and preparation in guitar study and perform music representing a variety of musical styles. Ear-training and music theory are emphasized and students complete several creative projects, continually refining their guitar performance skills. Students analyze the guitar styles of a variety of cultures and incorporate them into their own improvisations. This course may be repeated for credit. **Prerequisite: Guitar 1 A/B**

**686600/686700 Symphonic Orchestra A/B**  Students develop skills that will enable them to perform music at the Grade IV to VI level of difficulty. They focus on the study of literature composed originally for the orchestra during the 20th and 21st centuries. Additional experiences may include full symphony orchestra, chamber and solo performance, and musical theater orchestra. Public performances during and after school hours may be required to meet course objectives. This course may be repeated for credit. **Prerequisite: Concert Orchestra or by audition, and the need to balance instrumentation as determined by the director**

**671100/671200 Chorus 1 A/B**

**672100/672200 Chorus 2 A/B**

**673100/673200 Chorus 3 A/B Audition**
DANCE

774301/774302 Dance as PE - No prerequisite - This year-long course is for students new to dance. All grades - Dance Pathway entry course for 9th graders. PE Credit. Dance as PE explores movement as a creative art form. Student learning includes opportunities to develop kinesthetic awareness, proper body alignment, physical strength, flexibility, endurance, and care of the dance instrument while exploring improvisational and expressive movement and various forms of dance technique. Dance elements and basic principles of composition are studied and practiced. Through the study of dance in various cultures and historical periods, students broaden their understanding of dance as an art form. All students will perform in the Semester Dance Concert.

Level 1 Courses - Courses for the beginning dancer - grades 10-12. Fine Arts credit.

601700/601800 Dance as Fine Art - Level 1 Dance Course (also open to Level 2 and Level 3) - 10-12 Grades. Fine Art Credit. Dance as Fine Art is a beginning course in dance (modern, jazz, ballet, and choreography) with an emphasis on technical development, aesthetic, historical, and cultural appreciation and the development of criteria for dance criticism. Students will be introduced to basic choreographic experiences as the means for communicating dance ideas and concepts. The historical, social, cultural, and aesthetic significance of dance will be interwoven throughout the study of each dance discipline. All students will perform in the Semester Dance Concert.

608000/608100 Jazz I - Level 1 Dance Course- (also open to Level 2 and Level 3) 10-12 Grades. Fine Art Credit. Jazz I is a beginning course on jazz with an emphasis on technical development, aesthetic, historical, and cultural appreciation and the development of criteria for dance criticism. Students will be introduced to basic choreographic experiences as the means for communicating dance ideas and concepts. The historical, social, cultural, and aesthetic significance of dance will be interwoven throughout the study of Jazz Dance. All students will perform in the Semester Dance Concert.

607000/607100 Tap I - Level 1 Dance Course- (also open to Level 2 and Level 3) 10-12 Grades. Fine Art Credit. Tap I is a beginning course with an emphasis on technical development, aesthetic, historical, and cultural appreciation and the development of criteria for dance criticism. Students will be introduced to basic choreographic experiences as the means for communicating dance ideas and concepts. Dancers will learn introductory level tap exercises, technique, and vocabulary. All students will perform in the Semester Dance Concert.

Level 2 Courses - Courses for the Intermediate Dancer - grades 10-12. Fine Arts credit.

606200/606300 Intermediate Dance - Level 2 Dance Course (also open to Level 3) - 10-12 Grades. Fine Art Credit. Intermediate Dance is an extension of the dance concepts and techniques studied during Dance as Fine Art and Dance as PE. Dancers experience the role of both choreographer and dancer and have opportunities to present their work. Students are challenged technically through body alignment, critique and self-assessment. Through the study of dance in various cultures and historical periods, students broaden their understanding of dance as an art form. Students will explore connections with other art forms and subject areas. All students will perform in the Semester Dance Concert.

607600/607700 Hip Hop II - Level 2 Dance Course (also open to Level 3) - 10-12 Grades. Fine Art Credit. Hip Hop II is an intermediate course in dance with an emphasis on technical development, aesthetic, historical, and cultural appreciation and the development of criteria for dance criticism. Students will be introduced to basic choreographic experiences as the means for communicating dance ideas and concepts. The historical, social, cultural, and aesthetic significance of dance will be interwoven throughout the study of each dance discipline. All students will perform in the Semester Dance Concert.
Modern II - Level 2 Dance Course (also open to Level 3) - 10-12 Grades. Fine Art Credit.
Modern II is an intermediate course and is an extension of the dance concepts and techniques studied during Level 1 courses. Students experience the role of both choreographer and dancer and have opportunities to present their work. Students are challenged technically through body alignment, critique and self-assessment. Through the study of dance in various cultures and historical periods, students broaden their understanding of dance as an art form. Students will explore connections with other art forms and subject areas. All students will perform in the Semester Dance Concert.

Jazz II - Level 2 Dance Course - (also open to Level 3) 10-12 Grades. Fine Art Credit.
Jazz II is an intermediate course on jazz and is an extension of the dance concepts and techniques studied during Level 1 Jazz. There is an emphasis on technical development, aesthetic, historical, and cultural appreciation and the development of criteria for dance criticism. Students will be introduced to intermediate level choreographic experiences as the means for communicating dance ideas and concepts. The historical, social, cultural, and aesthetic significance of dance will be interwoven throughout the study of Jazz Dance. All students will perform in the Semester Dance Concert.

Choreography II Level 2 Dance Course (also open to Level 3) - 10-12 Grades. Fine Art Credit.
Dance Choreography and Production is an Intermediate/Advanced level course (open to Level 2 or 3.) Dancers experience the role of both choreographer and dancer and have opportunities to present their work. Students will learn specific choreography exercises and techniques that will enable them to hone their skills as choreographers. Students will also be introduced to the process involved in lighting, costuming, and staging their works. All students will perform in the Semester Dance Concert.

Level 3 Courses - Courses for the Advanced Dancer - grades 10-12. Fine Arts credit.

Advanced Dance - Level 3 Dance Course - 10-12 Grades. Fine Art Credit.
Advanced Dance is an extension of the dance concepts and techniques studied during Intermediate Dance. Students experience the role of both choreographer and dancer and have opportunities to present their work. Students are challenged technically through body alignment, critique and self-assessment. Through the study of dance in various cultures and historical periods, students broaden their understanding of dance as an art form. Students will explore connections with other art forms and subject areas. All students will perform in the Semester Dance Concert.

Audition Only

Latin Dance Company - Audition only for 10-12 Graders - all levels. Fine Art Credit.
This audition only Dance Company provides students with the opportunity to develop a intermediate/advanced level of Latin ballroom dance technique, and are able to refine their skills as both choreographers and performers. Students apply their creative and technical knowledge and skills through a variety of production and performance opportunities. Students will also gain awareness through team building skills and community based projects and events. Using expanded aesthetic criteria students analyze, synthesize, and evaluate their own choreography as well as works of others. The Dance Company will perform in the MCPS Annual Latin Dance Competition, the Winter and Spring Dance Concerts, in addition to attending Dance Festivals and other related trips. Students will also participate in Dance Residencies with guest artists.
606400/606400 Dance 3 (Junior Dance Company) - Audition only for 10-12 Graders - all levels. Fine Art Credit.
This audition only Dance Company provides students with the opportunity to develop an intermediate/advanced level of dance technique and refine their skills as both choreographer and performer. Students apply their creative and technical knowledge and skills through a variety of production and performance opportunities. Using expanded aesthetic criteria students analyze, synthesize, and evaluate their own choreography as well as works of others. The Dance Company will perform in the Winter and Spring Dance Concerts in addition to attending Dance Festivals and other dance related trips. They will also participate in Dance Residencies with guest artists.

607800/607900 Senior Dance Company – Audition only for 10-12 Graders - all levels. Fine Art Credit.
This audition only Dance Company provides students with the opportunity to develop an advanced level of dance technique and refine their skills as both choreographer and performer. Students apply their creative and technical knowledge and skills through a variety of production and performance opportunities. Using expanded aesthetic criteria students analyze, synthesize, and evaluate their own choreography as well as works of others. The Dance Company will perform in the Winter and Spring Dance Concerts in addition to attending Dance Festivals and other dance related trips. They will also participate in Dance Residencies with guest artists.

ESOL Cultural Dance 9-12 Grades PE Credit (774301/774302) Fine Art Credit (601731/601831)
Cultural Dance explores movement as a creative art form. Student learning includes opportunities to develop kinesthetic awareness, proper body alignment, physical strength, flexibility, endurance, and care of the dance instrument while exploring improvisational and expressive movement and various forms of dance technique. Dance elements and basic principles of composition are studied and practiced. Through the study of dance in various cultures and historical periods, students broaden their understanding of dance as an art form. All students will perform in the Semester Dance Concert.

THEATER

692600/692700 Theatre 1 Students gain an understanding of the entire process through which human behavior is translated into a written drama, produced as a play, and presented to an audience. The study of theater aesthetics, history, and criticism is balanced with workshop training in acting and basic theater production skills. This course is the prerequisite for all other high school theater courses.

692800/692900 Theatre 2 Knowledge and skills learned in Theater 1 are applied to production and performance. Students study script analysis, character development, performance skills and processes, and beginning technical production skills. Studying the aesthetics and history of the theater, reading plays, and attending plays provide a balanced framework for application of theater criticism. Writing and thinking skills are reinforced through journaling. Careers in acting and technical theater are discussed. **Prerequisite: Theatre 1**

690400/690500 Musical Theatre Students study a variety of music styles, performance techniques, and design for musical theater; the history and development of musical theater; and the collaborative efforts of designers, directors, choreographers, and composers that make it work. **Prerequisite: Theatre 1 or Chorus**

691200 Advanced Acting Students will do an in depth study of acting techniques, as well as script analysis, in order to develop characters in both drama and comedy. Students must have had no lower than a C in Theatre 2 and/or permission of the instructor.
691400 Directing  Students will do an in depth study of directing techniques and script analysis in order to
develop concepts and staging choices as a director.  Students must have had no lower than a C in Theatre 2 and/or
permission of the instructor.

PHYSICAL EDUCATION

772000/772100 General Physical Education
These are the recommended introduction to high school physical education courses for ninth graders. They
include opportunities for a varied selection of individual, dual, team, dance, and personal development activities.
Students are guided in identifying and improving their fitness levels through the development and use of
personalized fitness plans. 9th Grade only
774201/32 Specialty PE – Basketball
774601/32 Specialty PE – Football
774801/32 Specialty PE – Soccer
775201/32 Specialty PE - Weight/Strength Training & Conditioning
773601/32 Specialty PE - Lifetime Sports/Net Games
774400/32 Specialty PE – Floor Hockey

HEALTH COURSES

783500 Comprehensive Health Education - Students learn factual health information and develop lifetime
skills in mental health; tobacco, alcohol, and other drugs; personal and consumer health; nutrition and fitness;
safety and injury prevention; family life and human sexuality; and disease prevention. Although this course is
required for graduation, parental permission must be specifically provided for students under the age of 18 to
participate in family life and human sexuality, and disease prevention and control units. Prerequisite: Grade 10

783300 Family Life and Human Development  Students develop a greater understanding of how family
relationships and human sexuality have an impact on individual health and society. Topics include interpersonal
relationships, economics of family life, responsibilities of marriage and parenting, pregnancy prevention;
pregnancy and childbirth, and sexually transmitted infections. Due to the nature of this course, parental
permission is required for students under 18. This course does not meet the Health Education graduation
requirement. Prerequisite: Comprehensive Health Education
**Business Management & Marketing**

**413100/413200 Economics and Business A/B**

**CM CDP 0.5 credit**
For those students contemplating becoming a lawyer or paralegal in the business community, this course introduces topics involving supply and demand theory, inflation, unemployment, fiscal and monetary policy, government regulations, and international trade. Students investigate how economics concepts impact decision making in the world of business. Students focus on evaluating both sides of an issue and making decisions based on facts.

**545000/545100 Entrepreneurship and Business Management 1 A/B** Whether students’ dreams involve working at a fast-moving entrepreneurial organization or running an existing company, in this foundational course they learn the necessary skills they need to understand business principles. Student entrepreneurs work in teams to investigate topics such as business opportunities, feasibility studies, and development of a business plan, financing alternatives, marketing, and legal forms of organization.

**543100/543200 Marketing A/B** Students learn economics and the role of marketing in today's global economy. This course includes a study of human relations, business organizations, market services, competition, and market research.

**543300/543400 Advanced Marketing A/B** Students explore the managerial responsibilities of marketing executives and analyze common management technique problems. Students investigate how marketing concepts affect decision-making in the world of business.
Prerequisite: Marketing A/B

**411100/411200 Accounting A/B** Want to become a stockbroker, a financial analyst, or run your own business? Using microcomputers for electronic spreadsheets and accounting simulations, students will be able to set up accounts, prepare qualitative reports, and learn about auditing principles, budgets, and final reports. Emphasis is placed on student interest and how accounting is conducted in our society. Students may receive credit for this course at Montgomery College.

**415800 Personal Finance (1 Semester)** This course is designed to help students identify and learn personal strategies for managing financial resources. Investment simulations are used to focus on the importance of managing funds and investing wisely. Topics include consumerism, personal finance, credit, and investment planning.

**781800/781900 Internship, A/B Double Period 1.0 credit per semester** This unpaid internship complements the student's school program and is pursued under the supervision of school staff. Regularly scheduled in-school seminars explore career and workplace issues. Students will learn about society directly and explore various career options. Internships are coordinated at the student's home school. Hours required per semester for the internship experience are: single period, 75 hours; double period, 150 hours; triple period, 225 hours. Students may be required by the sponsoring organization to provide appropriate documentation that may include a social security number and/or proof of citizenship.

**782200/782300 Internship, A/B Triple Period 1.5 credit per semester** This unpaid internship complements the student's school program and is pursued under the supervision of school staff. Regularly scheduled in-school seminars explore career and workplace issues. Students will learn about society directly and explore various career options. Internships are coordinated at the student's home school. Hours required per semester for the internship experience are: single period, 75 hours; double period, 150 hours; triple period, 225 hours. Students may be required by the sponsoring organization to provide appropriate documentation that may include a social security number and/or proof of citizenship.
547100 Internship, Business Management and Finance  
**Prerequisite:** At least 2 credits in a Entrepreneurship and Business POS  
CDP 0.5 credit  
Students apply knowledge and skill sets acquired in their program of study to an authentic internship. Collaborating with professionals and mentors in the related career field, students participate in program-specific learning, leadership seminars, networking opportunities, and relevant workplace experiences.

**LAW**

514800/514900 Justice, Law, and Society, Introduction A/B  
Students will deepen their knowledge and understanding of the judicial branch at the national, state, and local levels of government to establish a foundation of understanding of the American legal system; explore careers in criminology; forensic sciences and investigation skills; and police work at local, state, and federal levels; explore a crime from beginning to end through the eyes of the public professional responsible for law enforcement; and examine the same set of facts from a civil perspective.

514600/514700 Law and the Administration of Justice A/B  
This yearlong course will focus on law within our society, informing citizens of their rights, and the ability to support a position based on facts. The course begins with an in-depth focus on the Bill of Rights and continues with the consideration of due process, equal protection, and human rights. In the second semester, students will apply their knowledge through mock trial and moot court opportunities. All students will learn and demonstrate critical-thinking and legal-research skills. This course is designed to help students understand the processes by which American society seeks justice and order through law, and ways in which people can participate in those processes. Students examine history and philosophy of law, how the law works and can be made to work in actual situations, and major substantive areas of law such as torts, property, criminal and juvenile law. **Prerequisite:** Intro to JLS

514400/514500 Contemporary Issues in Justice, Law, and Society A/B  
This course provides opportunities for students to explore contemporary issues in the field of law. Students examine topics that have become a significant interest within fields related to Justice, Law, and Society, such as forensic testing, public safety, environmental law, ethics, and homeland security. **Prerequisite:** Law and the Administration of Justice

045800/04589800 Administration of Justice  
An analysis of crime and the administration of justice in a diverse, democratic society operating within a global environment. Emphasis is on the theoretical and historical development of law enforcement, courts, and corrections and the agents and agencies responsible for administering justice.

514200 Internship - Law, Government, Public Safety and Administration  
**Prerequisite:** At least 2 credits in a related program of study  
CM 0.5 credit  
Students apply knowledge and skill sets acquired in their career pathway programs to an authentic internship. Collaborating with professionals and mentors in the related career field, students participate in program-specific learning, leadership seminars, networking opportunities and relevant workplace experiences.
HUMANITIES AND MEDIA

517300/517400 Video Production A/B This class you will learn the history of Communication and basic television production skills. Projects worked on in class will contribute to the school’s morning show. Possible projects include interviews, entertainment or sports segments, how-to, music videos, and game show or talk show. This class is open to 9-12th graders.

517500/517600 Electronic Video Production A/B This is the second level of media classes offered at Northwood. We will learn about video production outside of a studio. This class focuses on shooting video and editing. Possible projects include PSAs, commercials, mini-documentaries, short films, and video packages for the morning show. This class is open to 10th – 12th graders.

517700/517800 Media Management & Production A/B This is the highest level of class offered at Northwood. This class’s main responsibility is to produce and run the WNHS morning show. The main focus of this class is how to be an effective producer/director. These students will also create and produce their own 30 minute show at least once a semester. This class is open to 11th and 12th graders.

113000/00 Creative Writing A/B This course is designed for students interested in creative and advanced expository writing. Students receive guided instruction in creative writing with special emphasis on poetry, drama, fiction, and expository writing. Regular guidance and instruction take place mainly in small, common-interest groups, supplemented by frequent teacher-student conferences and critiques.

11000/115100 Introduction to Journalism This course is designed for students who have no prior experience with journalism. Students learn the basics of writing a news article, including writing a lead, the five Ws, how to gather the right information, and copyediting and proofreading basics.

1153 Publications Editing, Layout, and Business Management (Yearbook) Students learn the techniques and knowledge needed to produce and manage school newspapers, yearbooks, and literary magazines. This course is highly recommended for students serving on the editorial staff of these publications. The course provides instruction in all aspects and phases of publications planning, including editing, layout, advertising, and budget.
**CAREER EDUCATION**

**809200/809300 College/Career Research and Development A/B**  
Students research current career information for successful career planning and management. Students develop self-awareness, career awareness, financial literacy, communication and indispensable work-related knowledge and skill sets. A variety of career and interest assessments, as well as portfolio development, demonstrating workplace and academic readiness, prepare students for college and careers. CCRD links students with industry professionals through site-based work experience.

**806500/806600 Career Seminar A/B**  
This course teaches how to effectively manage career and educational choices through incorporating employment, education, and training goals. It builds financial literacy skills and integrates the Maryland's Skills for Success competencies. Students complete a career portfolio that demonstrates proficiency in workplace readiness, personal financial management, and personal growth and development, and employment experiences. **Prerequisite: College/Career Research and Development** Corequisite: **Site-Based Work Experience A/B**

**544100/544200 Site-Based Work Experience A/B Double Period 1.0 credit per semester**  
Students participate in a site-based experience in conjunction with the career seminar class. Students work directly with industry professionals in a career of interest, while refining career goals and postsecondary plans. Student work sites must be approved and supervised by the teacher. Site-based learning must take place during school hours to allow for required work-site supervision by the teacher. To earn credit for double period, students are required to have a minimum of 135 hours of work experience per semester. **Prerequisite: College/Career Research and Development A/B (8092/8093) Corequisite: Concurrent enrollment in College/Career Seminar class is required.**

**INTERNSHIP**

**781800/781900 Internship, A/B Double Period 1.0 credit per semester**  
This unpaid internship complements the student’s school program and is pursued under the supervision of school staff. Regularly scheduled in-school seminars explore career and workplace issues. Students will learn about society directly and explore various career options. Internships are coordinated at the student's home school. Hours required per semester for the internship experience are: single period, 75 hours; double period, 150 hours; triple period, 225 hours. Students may be required by the sponsoring organization to provide appropriate documentation that may include a social security number and/or proof of citizenship.

**782200/782300 Internship, A/B Triple Period 1.5 credit per semester**  
This unpaid internship complements the student's school program and is pursued under the supervision of school staff. Regularly scheduled in-school seminars explore career and workplace issues. Students will learn about society directly and explore various career options. Internships are coordinated at the student's home school. Hours required per semester for the internship experience are: single period, 75 hours; double period, 150 hours; triple period, 225 hours. Students may be required by the sponsoring organization to provide appropriate documentation that may include a social security number and/or proof of citizenship.

**114200 College Test Prep (1 Semester)**  
This one-semester course is designed to improve student achievement on the ACCUPLACER, ACT and the SAT. Students review English and math skills related to the test formats and develop test-taking skills.
**EARLY CHILDHOOD DEVELOPMENT**

484700/484800 **Child and Adolescent Development 1 A/B**  In this introductory course, students become part of an education team that has direct interaction with 4-year-olds in a lab school setting. Students interested in education, pediatric medicine, physical therapy, family law, psychology, and sociology enroll in this course in preparation for college and career experiences. After a rigorous training period, students become part of a team of teachers responsible for the day-to-day workings of a lab school.

488000/488100 **Child and Adolescent Development Double Period 2 A/B**  After successful completion of Child Development 1, students continue to develop their teaching skills as they assume increased leadership responsibilities in the lab school setting. Students are responsible for program management as they develop and implement age-appropriate experiences for preschoolers. Upon completion of Child Development 2 and all certification requirements, students may earn certification in the 90+9 Clock Hours Program. This certification may allow a student to obtain senior staff status in the childcare industry. 1.0 credit 1ST semester  Prerequisite: Child and Adolescent Development 1A/B

488200/488300 **Child and Adolescent Development 3 B DP**  After successful completion of Child Development 2, students continue to develop their teaching skills as they assume increased leadership responsibilities in the lab school setting. Students are responsible for program management as they develop and implement age-appropriate experiences for preschoolers. Upon completion of Child Development 2 and all certification requirements, students may earn certification in the 90+9 Clock Hours Program. This certification may allow a student to obtain senior staff status in the childcare industry. 1.0 credit 1ST semester  Prerequisite: Child and Adolescent Development 1A/B

488400/488432 **Education, Training, and Child Studies Internship**  Prerequisite: At least 2 credits in the Early Child Development POS

CM (AL) 5 SSL 0.5 credit

Students apply knowledge and skill sets to a comprehensive field-based experience. Collaborating with mentor teachers and other professionals in educational settings, students participate in program-specific learning, leadership seminars, networking opportunities, and relevant workplace experiences. They analyze the impact that leadership theories; professional ethics; current trends; and parent, community, and government organizations have on contemporary education and the child care industry. Students explore postsecondary education and career options and prepare for the interview process. Students complete a professional portfolio that is aligned with the Interstate New Teacher Assessment and Support Consortium and the MCPS Teacher Performance Standards.

**MC2**

046300 CE FOREIGN LANG
045300 CE ANTHROPOLOGY
047300 CE SCIENCE
045500 CE BUSINESS
045700 CE COMPUTER SCI
047500 CE SPEECH
0350 DC ADV ARTS
# Course List 2018 – 2019

## English
- ENGLISH
- 131100/131200 English 9 A/B
- 131300/131400 Honors English 9A/B
- 132100/132200 English 10 A/B
- 132300/132400 Honors English 10 A/B
- 133100/133200 English 11 A/B
- 133300/133400 Honors English 11 A/B
- 101500/101600 AP Lang & Comp A/B (11th only)
- 114200/114232 College Test Prep (1 Semester)
- 134100/134200 English 12 A/B
- 134300/134400 Honors English 12 A/B
- 101700/101800 AP Literature A/B (12th only)
- 114591/114592 Basic Reading

## ESOL
- 120140/121140 ESOL Level 1 A/B
- 121740/121840 ESOL Level 1½ A/B
- 120240/121240 ESOL Level 2 A/B
- 121940/122040 ESOL Level 2 ½ A/B
- 120340/121340 ESOL Level 3 A/B
- 122440/122242 ESOL Adv Communications A/B
- 120440/121440 ESOL 4 A/B
- 120540/121540 ESOL 5 A/B
- 113940/114040 Academic Reading ESOL 1
- 124340/124440 Language of Math METS 1
- 124600/124700 US Culture ESOL 1 & METS 1
- 114340/114342 Developmental Reading (ESOL 2)
- 311340/311442 MAPS
- 120640/120641 ESOL Lab A
- 121640/121642 ESOL Lab B
- 361140/361240 Applied Science (ESOL 2)
- 774331/774333 ESOL Dance (PE Credit)
- 601731/601831 ESOL Dance (Fine Arts Credit)

## Mathematics
- 311100/311200 Algebra 1 A/B
- 320100/320200 Geometry A/B
- 320300/320400 Honors Geometry A/B
- 330100/330200 Algebra 2 A/B (1 year)
- 331500/331600 Algebra 2 A/B (1 of 2 year)
- 331700/331800 Algebra 2 C/D (2 of 2 year)
- 331000/331100 Honors Algebra 2 A/B
- 348900/349000 Precalculus A/B
- 335000/335100 Honors Precalculus A/B
- 312100/312200 Quantitative Literacy A/B
- 332200/332300 Statistics & Math Modeling A/B
- 335600/335700 Calculus with Applications A/B
- 345200/345300 AP Calculus AB A/B
- 349100/349200 AP Calculus BC A/B
- 332000/332100 AP Statistics A/B
- 304800/304900 Multivariable Calculus A/B
- 323140/323240 Related Math A/B (ESOL)

## Science
- SCIENCE
- 363100/363200 Biology A/B
- 362100/362200 Honors Biology A/B
- 382100/382200 Honors Physics A/B
- 372100/372200 Chemistry A/B
- 371100/371200 Honors Chemistry A/B
- 357700 Honors Geo Sci (Earth Systems) (1 semester)
- 357900 Honors Geo Sci (Paleontology) (1 Semester)
- 365500 Wildlife Biology (1 semester)
- 365700/365800 Molecular Biology A/B
- 367100/367200 Horticulture A/B
- 376100/376200 Anatomy & Physiology A/B
- 385600/385700 Astronomy A/B
- 386400/386500 Forensic Science A/B
- 365900/366000 AP Environmental Science A/B
- 375100/375200 AP Chemistry A/B (Double Period)
- 365100/365200 AP Biology A/B (Double Period)
- 389100/389200 AP Physics 1 A/B
- 389300/389400 AP Physics 2 A/B

## Technology Education
- TECHNOLOGY EDUCATION
- 516100/516200 Foundations of Technology A/B (TE)
- 280800/280900 Advanced Design Applications A/B (AT)
- 281000/281100 Advanced Tech Applications A/B (AT)
- xxxxxxx/xxxxxxx Engineering Design A/B (TE)
- 292200/292300 Found of Computer Science A/B (Comp Sci.)
- 291600/291700 Found of Computer Science A/B (TESS)
- 292400/292500 AP Comp Sci. Prin A/B (Comp Sci)
- 291800/291900 AP Comp Sci. Prin A/B (TESS)
- 290100/290200 AP Comp Sci. A/B (Java)
- 296500/296600 Computer Programming 3
- 781300/781600 Internship A/B Single Period
- 781800/781900 Internship A/B Double Period
- 782200/782300 Internship A/B Triple Period
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>211000/211200</td>
<td>US History A/B</td>
</tr>
<tr>
<td>211100/211300</td>
<td>Honors US History A/B</td>
</tr>
<tr>
<td>211400/212400</td>
<td>AP US History A/B</td>
</tr>
<tr>
<td>106000/106032</td>
<td>Literacy in the Digital Age (AP companion)</td>
</tr>
<tr>
<td>210700/210800</td>
<td>National, State &amp; Local Govt A/B</td>
</tr>
<tr>
<td>212700/212800</td>
<td>Honors National, State &amp; Local Govt. A/B</td>
</tr>
<tr>
<td>210400/210500</td>
<td>AP National, State &amp; Local Govt A/B</td>
</tr>
<tr>
<td>222100/222200</td>
<td>Modern World History A/B</td>
</tr>
<tr>
<td>222300/222400</td>
<td>Honors Modern World History A/B</td>
</tr>
<tr>
<td>224000/224100</td>
<td>AP World History A/B</td>
</tr>
<tr>
<td>234700</td>
<td>Global Issues in the 21st Cent. (1 semester)</td>
</tr>
<tr>
<td>230500/231400</td>
<td>Sociology 1/2</td>
</tr>
<tr>
<td>220900</td>
<td>Medieval History (1 semester)</td>
</tr>
<tr>
<td>233000/233100</td>
<td>AP Psychology A/B</td>
</tr>
<tr>
<td>233200/233300</td>
<td>AP Human Geography A/B</td>
</tr>
<tr>
<td>221600/221700</td>
<td>AP European History</td>
</tr>
<tr>
<td>224800</td>
<td>Women’s Studies (1 semester)</td>
</tr>
<tr>
<td>220400</td>
<td>Latin American History (1 semester)</td>
</tr>
<tr>
<td>210300</td>
<td>African American History (1 semester)</td>
</tr>
<tr>
<td>171100/172100</td>
<td>Spanish 1 A/B</td>
</tr>
<tr>
<td>171200/172200</td>
<td>Spanish 2 A/B</td>
</tr>
<tr>
<td>171300/172300</td>
<td>Spanish 3 A/B</td>
</tr>
<tr>
<td>173300/174300</td>
<td>Honors Spanish 3 A/B</td>
</tr>
<tr>
<td>173400/174400</td>
<td>Honors Spanish 4 A/B</td>
</tr>
<tr>
<td>171500/172500</td>
<td>Spanish 5 A/B</td>
</tr>
<tr>
<td>175900/176000</td>
<td>AP Spanish Language A/B</td>
</tr>
<tr>
<td>176100/176200</td>
<td>AP Spanish Literature A/B</td>
</tr>
<tr>
<td>177700/177800</td>
<td>Spanish for Spanish Speakers 1 A/B</td>
</tr>
<tr>
<td>177900/178000</td>
<td>Spanish for Spanish Speakers 2 A/B</td>
</tr>
<tr>
<td>178100/178200</td>
<td>Spanish for Spanish Speakers 3 A/B</td>
</tr>
<tr>
<td>161100/162100</td>
<td>French 1 A/B</td>
</tr>
<tr>
<td>161200/162200</td>
<td>French 2 A/B</td>
</tr>
<tr>
<td>163300/164300</td>
<td>Honors French 3 A/B</td>
</tr>
<tr>
<td>161400/162400</td>
<td>French 4 A/B</td>
</tr>
<tr>
<td>163400/164400</td>
<td>Honors French 4 A/B</td>
</tr>
<tr>
<td>161500/162500</td>
<td>French 5 A/B</td>
</tr>
<tr>
<td>163500/163600</td>
<td>AP French Language A/B</td>
</tr>
<tr>
<td>187100/187200</td>
<td>Chinese 1 A/B</td>
</tr>
<tr>
<td>187300/187400</td>
<td>Chinese 2 A/B</td>
</tr>
<tr>
<td>187500/187600</td>
<td>Chinese 3 A/B</td>
</tr>
<tr>
<td>158900/159000</td>
<td>Arabic A/B</td>
</tr>
</tbody>
</table>

**Business Management & Finance**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>545000/545100</td>
<td>Entrepreneurship &amp; Business Mgmt. A/B</td>
</tr>
<tr>
<td>543100/543200</td>
<td>Marketing A/B</td>
</tr>
<tr>
<td>543300/543400</td>
<td>Advanced Marketing A/B</td>
</tr>
<tr>
<td>411100/411200</td>
<td>Accounting A/B</td>
</tr>
<tr>
<td>415800</td>
<td>Personal Finance (1 semester)</td>
</tr>
<tr>
<td>547100/547112</td>
<td>Internship A/B</td>
</tr>
</tbody>
</table>

**Visual Arts**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>648600/648632</td>
<td>AP Studio Art 2-D (by recommendation)</td>
</tr>
<tr>
<td>645400/645500</td>
<td>Art and Culture</td>
</tr>
<tr>
<td>638100/639100</td>
<td>Ceramics/Sculpture 1 A/B</td>
</tr>
<tr>
<td>638300/639300</td>
<td>Ceramics/Sculp. 2 A/B (prereq: C/S 1 A/B)</td>
</tr>
<tr>
<td>638500/638600</td>
<td>Ceramics/Sculp. 3 A/B (prereq: C/S 2 A/B)</td>
</tr>
</tbody>
</table>

**Music**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>671100/671200</td>
<td>Chorus 1 A/B</td>
</tr>
<tr>
<td>672100/672200</td>
<td>Chorus 2 A/B</td>
</tr>
<tr>
<td>673100/673200</td>
<td>Chorus 3 A/B Audition</td>
</tr>
<tr>
<td>654500/654600</td>
<td>Music Theory</td>
</tr>
<tr>
<td>656500/656600</td>
<td>Music Perspective A/B</td>
</tr>
<tr>
<td>652000/652100</td>
<td>Piano 1 A/B</td>
</tr>
<tr>
<td>653500/653600</td>
<td>Piano 2 A/B</td>
</tr>
<tr>
<td>658500/658600</td>
<td>Guitar 1 A/B</td>
</tr>
<tr>
<td>659100/659200</td>
<td>Guitar 2 A/B</td>
</tr>
<tr>
<td>681100/688500</td>
<td>Beginning Band</td>
</tr>
<tr>
<td>682100/682200</td>
<td>Concert Band</td>
</tr>
<tr>
<td>686600/686700</td>
<td>Symphonic Orchestra (Strings)</td>
</tr>
<tr>
<td>682600/682700</td>
<td>Symphonic Band (audition only)</td>
</tr>
<tr>
<td>687100/687200</td>
<td>Jazz Ensemble (audition only)</td>
</tr>
</tbody>
</table>

**Drama**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>692600/692700</td>
<td>Theater 1 A/B</td>
</tr>
<tr>
<td>692800/692900</td>
<td>Theater 2 A/B</td>
</tr>
<tr>
<td>690400/690500</td>
<td>Musical Theatre</td>
</tr>
<tr>
<td>691200</td>
<td>Advanced Acting (1 semester)</td>
</tr>
<tr>
<td>691400</td>
<td>Play Directing (1 semester)</td>
</tr>
</tbody>
</table>

**Dance**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>774300/774332</td>
<td>Dance as PE</td>
</tr>
<tr>
<td>601700/601800</td>
<td>Dance as Fine Art</td>
</tr>
<tr>
<td>607000/607100</td>
<td>Tap 1</td>
</tr>
<tr>
<td>606200/606300</td>
<td>Dance 2</td>
</tr>
<tr>
<td>607600/607700</td>
<td>Hip Hop 2</td>
</tr>
<tr>
<td>608000/608100</td>
<td>Jazz 1</td>
</tr>
<tr>
<td>608200/608300</td>
<td>Intermediate Jazz</td>
</tr>
<tr>
<td>608400/608500</td>
<td>Advanced Jazz</td>
</tr>
<tr>
<td>601735/601835</td>
<td>Latin Dance Company</td>
</tr>
<tr>
<td>606600/606700</td>
<td>Modern 2</td>
</tr>
<tr>
<td>606400/606500</td>
<td>Dance 3 (Junior Dance Company)</td>
</tr>
<tr>
<td>609000/609100</td>
<td>Choreography 2/3</td>
</tr>
<tr>
<td>607800/607900</td>
<td>Senior Dance Company</td>
</tr>
<tr>
<td>774331/774333</td>
<td>ESOL Cultural Dance (PE credit)</td>
</tr>
<tr>
<td>301731/601831</td>
<td>ESOL Cultural Dance (Fine Arts credit)</td>
</tr>
</tbody>
</table>
PHYSICAL EDUCATION
772000/772100  Personal Fitness and Sport A/B
774200/774232  Basketball A/B
775200/775232  Weight/Strength Training A/B
774800/774832  Soccer A/B
773700/773733  Net Sports A/B
774600/774632  Football A/B
773600/773632  Lifetime Sports A/B
774400/774432  Floor/Street Hockey A/B

HEALTH
783500/783532  Health (1 Semester)
783300  Family Life (prereq: Health) (Sem. 2)

LAW
413100/413200  Economy and Business Law
514800/514900  Introduction to Justice, Law & Society
514600/514700  Law & Administration of Justice A/B

514400/514500  Contemporary Issues in Law A/B
514200/514212  Law Internship A/B

HUMANITIES AND MEDIA
115000/115100  Intro to Journalism
113000/113500  Creative Writing
517300/517400  Video Production A/B
517500/517600  Electronic Video Production A/B
517700/517800  Media Management and Production A/B
116700/116800  Yearbook A/B
233000/233100  AP Psychology A/B
230500/231400  Sociology 1/2
232000  Comparative Religions (1 semester)
210300  African-American History (1 semester)
176100/176200  AP Spanish Literature
175900/176000  AP Spanish Language
163500/163600  AP French Language