



ORANGE PARK HIGH SCHOOL 2017-2018 COURSE CATALOG

9th Grade

- ★ **Course Listings** ★
- ★ **Course Descriptions** ★
- ★ **Graduation Requirements** ★

2300 KINGSLEY AVENUE • ORANGE PARK, FL 32073
904-272-8101 • FAX 904-272-8174 • OPH.ONECLAY.NET

ORANGE PARK HIGH SCHOOL

Home of the Raiders!

In this packet:

*Scheduling Information, Academic Programs,
Course Descriptions, & More!*

Administration

Clayton Anderson, Principal

Anthony Bradley, Vice Principal

Justin Faulkner, Asst. Principal

Christy Fowler, Asst. Principal

School Counselors

Melissa McCrosky, Director

Dana Wilhelm

Tiffany Goolsby

Kami Melfa



ORANGE PARK HIGH SCHOOL

“HOME OF THE RAIDERS”

CLAYTON ANDERSON
Principal

ANTHONY BRADLEY
Vice Principal

JUSTIN FAULKNER
CHRISTY FOWLER
Assistant Principals

Orange Park High School Student,

I would like to welcome you to Orange Park High School. This school exists to help develop, teach, guide, and mold young people into life-long learners and upstanding citizens. In saying this, we strive to provide a well-rounded education that will include both rigor and nurture. We expect that you will soar to amazing heights on your progress as a Raider!

That progression begins today as you select your classes for the upcoming year. I hope that you will give this decision much thought. Obviously, you will want to select classes that meet state graduation requirements, but we encourage you to select classes that both interest you as well as those that will challenge you. With our goal of preparing life-long learners, we want to better prepare you for college and career readiness. This is why selecting courses now and looking towards the future is so relevant and an important step in your maturation process.

Academics are the number one initiative here at Orange Park High School, but in order to help serve you in providing a well-rounded education, we would also ask for you to get involved. By being involved through a club, sport, or other activity, you are improving your chances for success. Students who are involved in school do better academically and establish great relationships and support systems.

Finally, here at Orange Park High School, you are going to be welcomed by a support system that cares and wants to build a relationship and make an impact on your life. The question, is “Are you willing to make an impact on your own life?” This is your education, and we are here to help foster it. We look forward to building these relationships and working with you in the near future. Welcome to the Raider Family!

Sincerely,

Clayton Anderson
Orange Park High School
Principal

2300 Kingsley Avenue, Orange Park, Florida 32073
Phone (904) 272-8110 Fax (904) 272-8181

“An Equal Opportunity Employer”

CLASS OF 2021

Graduation Requirements 24 Credit Diploma

I. Credits

English	4 credits
Math	4 credits
Must include Algebra I and Geometry	
Science	3 credits
Must include Biology	
Social Studies	3 credits
Must include World History, American History, and American Government (1/2 credit) and Economics (1/2 credit)	
Physical Education	1 credit
Must include Personal Fitness (1/2 credit)	
Fine Arts/Practical Arts	1 credit
Courses that meet this requirement are listed in this curriculum guide.	
Must complete On-line Course (listed in catalog)	.5 or 1.0 credit
<u>Additional Electives</u>	<u>7 and above</u>
TOTAL	24 credits

II. Tests

New : Florida Standards Assessment—English Language Assessment (ELA)
(10th grade level)

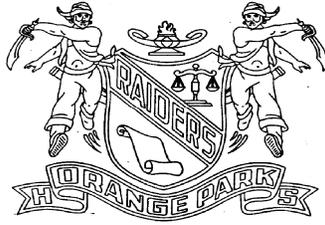
End of Course Assessment (EOC)

	Must Pass for Graduation
Algebra I	30% of Final Grade
Geometry	30% of Final Grade
Biology	30% of Final Grade
American History	30% of Final Grade
Algebra 2	30% of Final Grade

III. Grade Point Average

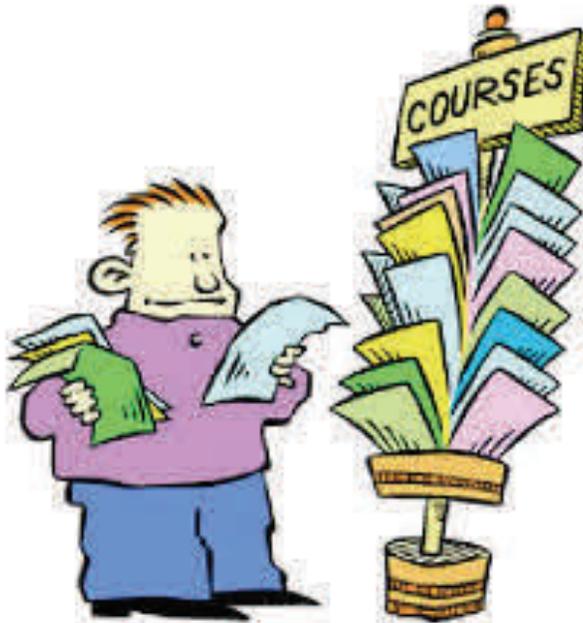
An overall cumulative unweighted GPA of 2.0 on a 4.0 scale

NOTE: State University MINIMUM admission requirements for Florida public 4-year institutions also include 2 credits of a Foreign Language (same language) .



How to complete your 9th grade course selection sheet

1. Obtain teacher recommendations for your core classes.
2. Rank order your electives. Place a "1" by your first choice, "2" by your second choice and so on.
3. Make sure you check for prerequisites. If a course has a prerequisite or needs a teacher recommendation, you must meet these requirements in order to be placed in the course. An asterisk (*) is next to each course on the course selection sheet that requires a pre-requisite.
4. Honors courses receive a weighted grade of .5 for the year, AP courses receive a weighted grade of 1.0, in accordance with Clay County policy. For example:
 - B in an honors course would have a weighted value of **3.5** (3.0 + .5)
 - B in an AP course would have a weighted value of **4.0** (3.0 + 1.0)
6. Choose your classes carefully and be sure to follow all deadlines. Some classes fill up fast!



Introduction to Academies:

A Personalized Education Plan for Every Student

Background: Jobs in the 21st Century require higher academic and technical skills. Research suggests that over the next five years many new job titles along with new skill sets will enter the workforce and career fields. To prepare for this challenging new labor market, it is the goal of **Orange Park High School** to adapt an educational approach and instructional method for our students that will meet the demands of the ever-changing job and career fields of the future.

Academy of Engineering

VyStar Academy of Business

Orange Park Medical Center Academy of Health

Academies are a type of school-within-a-school that provides a college preparatory curriculum with a career-related theme. Academies provide challenging, coherent course sequences that are a roadmap to future career goals. They share three basic features:

First, academies are **small learning communities**. An academy is comprised of a cluster of students who will have the same teachers and may share several classes each year. Teachers from academic and technical disciplines meet with each other on a regular basis and share in decision-making related to curriculum, content, and instruction.

Second, academies combine a **college preparatory curriculum with a career theme**. Academic courses that meet high school graduation and college entrance requirements are linked with technical and career courses that focus on the academy's field of work. Teachers coordinate course content and instructional strategies that adapt to every student's aptitude and academic ability. College and career counseling informs students about options for planning for employment and further education.

Third, academies embody **partnerships with employers**. It is the goal of OPHS academies to include representatives from local employers within the working community. Representatives from the Orange Park workforce would give advice on curriculum, appear as guest speakers in classes, assist in the supervision of student internships/ job shadowing, and some would serve as mentors for students.

Academies offer flexible plans of study which are organized around different career fields and academic rigor. They allow students the flexibility to change their career direction as new knowledge and skills are acquired. Students are encouraged to pursue the strongest course of study possible that provides more opportunities for success.

This academy is for students interested in a career in the Health Care Industry. We have a state of the art medical lab with six hospital beds—two of which have oxygen units on the wall just like in a real hospital. We are also proud of our SIM MAN which is an adult patient simulator designed to deliver the most realistic training possible. He talks, breathes, has light sensitive pupils and can be programmed so that students must analyze his symptoms. We also have many models to assist students learning various parts of anatomy and physiology. Younger students will become CPR and First Aid Certified and then will work toward either a Certified Nursing Assistant certification or an Emergency Medical Responder Certification as they progress through the program.

Health pathway:

9th grade—Medical Skills

10th grade—Health Science I

11th grade—Health Science II

12th grade—Nursing Assistant III/Allied Health Assisting III OR Emergency Medical Responders

Course Title: Medical Skills

8400320

This course is the introductory course to the medical curriculum. It will provide knowledge and skills to maintain and promote physical, social and emotional wellness. Instruction will include: investigating careers in health related occupations and services, skills for good personal, as well as community health, developing responsible consumer decision making skills regarding health screening and health care, safety, legal and ethical aspects for the health consumer, effects of stress on health, history of medicine and employability skills.



ACADEMY OF ENGINEERING

This Academy is for students interested in a career in Mechanical, Civil or Architectural Engineering. The Project Lead the Way curriculum is used for the first three years. **PLTW Engineering** empowers students to step into the role of an engineer, adopt a problem-solving mindset, and make the leap from dreamers to doers. There are dual enrollment classes for the senior year in partnership with Embry Riddle University.

Engineering pathway:

9th grade-Intro to Engineering Design

10th grade-Principles of Engineering

11th grade-Digital Electronics OR Civil Engineering & Architecture

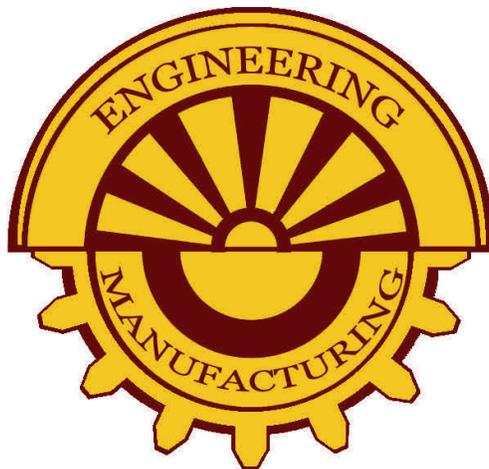
12th grade- Dual Enrollment

Intro to Engineering / Aircraft Systems (Unmanned)

Course Title: Intro. to Engineering Design (Honors)
(meets Fine Art/Practical Art requirement)

8600550

This is the first course offering in the Project Lead The Way program. The course teaches problem solving skills using a design development process. Models of product solutions are created, analyzed and communicated using solid 3D modeling computer design software. Students will have an opportunity to develop skills and practical knowledge in PC/Windows-based computer systems and design software, computer controlled equipment, design and drawing techniques. The course has been designed to introduce students to the scope, rigor, and discipline of an engineering program prior to entering college. This pathway leads to a certification in Autodesk Certified Associate.





VySTAR ACADEMY OF BUSINESS
and
LEADERSHIP

This academy is designed for students interested in business and banking. Students can choose to study Digital Design or Accounting. Select VyStar students will enjoy hands on learning while operating and managing the VyStar Branch on the OPHS Campus.

Digital Design pathway:

9th grade-Digital Info Tech OR
Digital Design I

10th grade-Digital Design I or II

11th grade-Digital Design II or III

12th grade-Digital Design III
OR Guided Workplace Learning
(OJT)

Accounting pathway:

9th grade-Digital Info Tech
or Accounting I

10th grade-Accounting I or
II

11th grade-Accounting II
or III

12th grade-Accounting III
or Guided Workplace
Learning (OJT)

Course Title: Digital Information Technology (meets Fine/Practical Art requirement)

8207310

This course is designed to provide a basic overview of current business and information systems, to observe industry trends, and to introduce students to the basic skills required for today's business environments. Emphasis is placed on developing proficiency in keyboarding, word processing, spreadsheets, and database programs. This program leads to industry certification in Adobe Photoshop and InDesign.

Course Title: Digital Design 1

8209510

Prerequisite: Digital Information Technology

This course enhances skills developed for employment in digital design positions. The content includes experiences in computer generated art and text, graphic design, graphic production, electronic design skills, electronic layouts and illustrations, electronic scanning and the development of specialized skills in multimedia presentations. This course offers industry certification for Microsoft Office Specialist.

Course Title: Accounting Applications I (Honors)

8203310

Prerequisites: Digital Information Technology

This course is a must for students planning a career in Business. It will prepare students for careers in accounting, other areas of business, and provide a foundation for postsecondary accounting studies methods. It gives students an understanding of basic accounting and principles of recording business transactions and preparing financial statements. Students will use computers to gain experience in automated accounting. This course offers certification in QuickBooks.

CAREER & TECHNICAL EDUCATION ELECTIVES

Course Title: Auto Maintenance & Light Repair I

9504110

This program is designed to provide opportunity for students to acquire skills and knowledge necessary to obtain initial employment. Instruction includes use of technical and flat rate manual as well as a variety of hand tools. Instruction is provided in the disassembly, inspection and repair, replacement of parts involved in engine overhaul or repair ignition systems, emission control systems, fuel systems, brakes, transmissions and running gear. The installation and services of accessories is included. Learning experiences are provided in the use of electronic diagnostic systems. Activities of the vocational organization (Skills USA) are provided. This pathway leads to FADA certification.

Course Title: Carpentry I

8722110

The purpose of this program is to provide instruction in the different phases of residential construction. Included will be training in layout, fabrication, assembly, installation, and repair of structural units; common systems of frame mathematics, materials estimating, and interpretation of building codes. Emphasis is placed on care and use of carpentry tools, equipment and materials. Employability skills are included as well as activities of Skills USA. This program offers a great opportunity to earn money while you learn. This pathway leads to industry certification in Carpentry by the National Center for Construction & Education Research. (NCCER)

Course Title: Culinary Arts 1

8800510

Fee: \$10.00

Culinary 1 teaches students the basics of the food service industry. Emphasis is placed on safety and sanitation, food preparation, and serving. Food is prepared in quantity and sold in a restaurant setting. Students prepare lunches for Raider Restaurant and orders for school functions. The curriculum used is Serv-Safe. Students who take three consecutive years of Culinary Arts have the opportunity to become ProStart industry certified.

Course Title: Early Childhood Education I

8405110

This is the first course in the early childhood education program and covers Part 1 of the DCF mandated training (30 clock hours): Child Care Facility Rules and Regulations (6); Health, Safety and Nutrition (8); Identifying and Reporting Child Abuse and Neglect (4); Child Growth and Development (6); and Behavioral Observation and Screening (6). Also included are components on communication skills, methods of guidance and literacy activities.

Course Title: Welding I (Meets Fine Art/Practical Art requirement)

8754510

The purpose of this program is to prepare students for employment in the field of welding as a welder's helper or a skilled certified welder. The program can lead to a career in Welding Technology, Welding Engineering Technology degree, and Bachelor of Welding Engineering Technology degree, Engineering degree or degrees in related fields. The program will provide students with a foundation of knowledge and practical experience in welding with the emphasis on practical use of hand tools, metal cutting and fabricating equipment, welding processes the student will encounter on the job, safety, employability skills, and activities of Skills USA. This pathway leads to industry certification in Welding by the National Center for Construction & Education Research (NCCER).

CAREER & TECHNICAL EDUCATION ELECTIVES

Course Title: Applied Robotics

9410100

The purpose of this program is to provide students with a foundation of knowledge and technically oriented experiences in the study of the principles and applications of robotics engineering and its effect upon our lives and the choosing of an occupation. The content and activities will also include the study of entrepreneurship, safety, and leadership skills. This program focuses on transferable skills and stresses understanding and demonstration of the science and mathematics knowledge, technological tools, machines, instruments, materials, processes and systems related to robotics.

FINE ARTS ELECTIVES

Course Title: Art I/2D Comp I (meets Fine/Practical Art requirement)

0101300

Required: \$20.00 per semester

The content should include the development of an understanding of the elements and principles used in a work of art. Two-dimensional works of art will be produced with a particular composition, subject matter, and expressive quality. Students will be familiar with basic two-dimensional techniques and materials. Emphasis will be on awareness by making the student cognizant of what the artist deals with, enabling the students to have a greater appreciation of art.

Course Title: Ceramics / Pottery I (meets Fine/Practical Art requirement)

0102300

Required: \$25.00 fee per semester

Students learn basic hand-built ceramics and finishing techniques. Students also learn the elements and principles of design, and color theory to help them develop an understanding of art in various media. Students develop visual thinking, creativity, craftsmanship skills, and critical analysis by making a variety of functional and non-functional artwork. Emphasis is placed on the understanding and development of aesthetics in the ceram-

Course Title: Band I (meets Fine/Practical Art requirement)

1302300

Required: Director's approval.

A prerequisite for any band class must be successfully completing a Junior High Band program or another high school band program. If someone is involved in Orange Park High School activity that would prohibit them from participating in the marching band they will have to get permission from the director prior to joining band. Each student will work on ensemble rehearsal techniques, ensemble performance techniques, and individual music fundamentals indicative to their particular instrument while performing different styles of music from different periods of history.

Course Title: Chorus I (meets Fine/Practical Art requirement)

1303300

Prerequisite: None

The content should include enabling students to develop basic fundamental skills in vocal tone production, choral performance techniques, musical literacy, and music appreciation. This course is a pre-requisite for Gospel Chorus and any higher chorale course.

Course Title: Theatre I (meets Fine/Practical Art requirement)

0400310

The content should include an overview of theatre history. Plays will be read and discussed. Students will be introduced to the fundamentals of stage movement, make-up, costuming, set construction and lighting. Students will perform in mime, improvisation, monologues, readings and acting scenes.

Course Title: Piano/Keyboarding I (meets Fine/Practical Art requirement)

1301360

This class is designed for beginning piano students. The students learn fundamentals of music as well as piano technique.

Course Title: Jazz Ensemble (7th period only)

1302500

Prerequisite: Director's approval/Audition/Participation in the primary band classes

One Jazz Ensemble class will be offered 7th period to enable all students to participate. Improvisation, big band charts, and combo playing will be included.

Course Title: Journalism I (meets Fine Art requirement)

1006300

Prerequisite: Application and Advisor Approval, Interview, Writing Sample and 2.5 unweighted GPA

The purpose of this course is to enable students to develop fundamental skills in the production of print and electronic journalistic media. Students will learn and use InDesign and PhotoShop and take a certification exam. In addition, students will be required to demonstrate fundamental use of organization and management techniques related to production of journalistic media (e.g., team building, leadership, business skills). Advertisement sales are a course and grade requirement. Hands – on activities and workshops are integral to this course and may require students to participate in activities beyond the school day. This class will produce the yearbook and requires an application, writing sample, interview, and advisor approval. Applicants are required to have a 2.5 unweighted GPA and teacher recommendations. Applications will be available March 1-10.
Please select an alternative course as a backup.



PHYSICAL EDUCATION

All PE classes require the Orange Park physical education uniform. Shorts are \$10.00 and shirts are \$5.00. Lockers must be purchased for an additional \$3.00 per semester. Please pay with cash or money order only.

Course Title: Personal Fitness

1501300 (.5 CR)

Required for Graduation

The content will include knowledge of the importance of physical fitness, assessment of the health related components of physical fitness, and problems associated with inadequate fitness levels.

Course Title: Team Sports I

1503350 (.5 CR)

Prerequisite: None

The content should include knowledge and application of skills, techniques, strategies, rules and safety practices necessary to participate in softball, flag football, soccer, volleyball, basketball and other team oriented sports. Knowledge of the importance of cardiovascular endurance will also be included.

Course Title: Athletic Weight Training

1501340 (.5 CR)

The content should include knowledge of the importance of muscular strength and endurance, assessment of muscular strength and endurance, of health problems associated with inadequate levels of muscular strength and endurance, knowledge of skeletal muscles, and knowledge of biomechanical and physiological principles to improve and maintain strength and endurance, knowledge of sound nutritional practices related to weight training, and knowledge of consumer issues related to weight training. Athletes will be placed in the weight lifting class by their coach.



FOREIGN LANGUAGE

Course Title: Spanish I

0708340

Prerequisite: 75 average or above in English, English Teacher recommendation.

The purpose of Spanish I is to introduce students to the Spanish language and its culture and to develop communicative skills and cross-cultural understanding. The content includes beginning skills in listening and speaking with special attention to pronunciation. An introduction to reading and writing also is included, as well as the fundamentals of grammar and culture.

Course Title: Spanish II

0708350

Prerequisite: Spanish 1 with 70 or higher or a native speaker

This course satisfies the foreign language completer requirement for Bright Futures and for university admissions. The content includes a continuation of the listening and oral skills required in Spanish I. Reading and writing receive more emphasis, while oral communication remains the primary objective. This course continues the cultural survey of Spanish-speaking people.

GENERAL ELECTIVES

Course Title: Naval Science I (ROTC)

1802300

The purpose of this course is to introduce cadets to the program and to provide a broad overview of the military, the government, and the importance of good citizenship. This course content includes introduction to the NJROTC program; introduction to leadership; citizenship; foundations of government; navy ships, naval aviation; health education, first aid, and drug, alcohol and tobacco abuse prevention; survival, orienteering; physical fitness; and military drill.

Course Title: Forensics I

2002480

Forensic Science I is an introductory course in which students will have the opportunity to explore how scientific principles are used in analyzing physical evidence found at crime scenes. This course will present laboratory and field methods forensic scientists use to solve problems. Students will take on the various roles of crime scene investigator, scientists and medical examiner in order to collect and evaluate evidence in a problem-solving environment. The fundamental objective will be to teach basic processes and principles of scientific thinking so as to apply them to solving problems related to all science disciplines. Topics will include crime scene processing skills, career opportunities, evidence law, fingerprinting, DNA, trace evidence, microscope use and basic laboratory skills.

Course Title: Advanced Placement Human Geography

2103400

Prerequisite: Teacher recommendation/Level 3 or higher on ELA Reading

This course is a college-level social sciences course and part of The College Board's Advanced Placement (AP) program. The purpose of this course is to enable students to develop higher level concepts and skills related to Human Geography. The content should include, but not be limited to, the following: regions, population studies, cultural concepts, spatial representation, political geography, land use, urbanization, issues related to space, place, and scale, and economic geography.

Course Title: Keyboarding and Business Skills (.5 credit) (CVA LAB)

8200320

This course, offered on OPHS campus in the CVA LAB, is designed for students preparing for success in high school, college, and beyond through efficient and proficient use of computer software. Students will experience keyboarding, word processing, desktop publishing, presentations, spreadsheets, and databases. This .5 credit course satisfies the **mandatory online course required for graduation** that must be completed by their senior year.



ENGLISH

Course Title: Intensive Reading

1000410

Prerequisite: Level 1 or Level 2 Reading on ELA

By Florida State statutes, any student who scores a Level 1 or Level 2 on the Reading portion of the FCAT is required to be enrolled in an Intensive Reading course. This course is designed to increase the development of reading, critical thinking, problem-solving, and test –taking skills using a variety of research-based programs and strategies from the Florida Department of Education.

Course Title: English I

1001310

Prerequisite: Language Arts III

The purpose of this course is to provide grade 9 students integrated language arts study in reading, writing, speaking, listening, and language for college and career preparation and readiness while using texts of high complexity. The content should include, but not be limited to, the following:

- active reading of varied texts for what they say explicitly, as well as the logical inferences that can be drawn
- analysis of literature and informational texts from varied literary periods to examine:
- writing for varied purposes
- effective listening, speaking, and viewing strategies with emphasis on the use of evidence to support or refute a claim in multimedia presentations, class discussions, and extended text discussions
- collaboration amongst peers

Emphasis will be given to preparation for state-mandated tests: the Florida Standards Assessment in Reading and Writing. All students are expected to complete required summer reading assignments prior to entering this grade level.

Course Title: English I Honors

1001320

Prerequisite: Level 3 or above on FSA ELA.

The purpose of this course is to provide grade 9 students advanced integrated language arts study in reading, writing, speaking, listening, and language for college and career preparation and readiness while using texts of high complexity. The content should include, but not be limited to, the following:

- active reading of varied texts for what they say explicitly, as well as the logical inferences that can be drawn
- analysis of literature and informational texts from varied literary periods to examine:
- writing for varied purposes
- effective listening, speaking, and viewing strategies with emphasis on the use of evidence to support or refute a claim in multimedia presentations, class discussions, and extended text discussions
- collaboration amongst peers

Emphasis will be given to preparation for state-mandated tests: the Florida Standards Assessment in Reading and Writing. All students are expected to complete required summer reading assignments prior to entering this grade level.

Honors and Advanced Level Course Note: Students at the honors level are expected to work at a higher level of academic rigor than a standard course would require. They will be challenged to think and collaborate critically on the content they are learning through the application, analysis, evaluation, and creation of complex ideas that are often abstract and multi-faceted.

MATH

Course Title: Algebra I

1200310

Prerequisite: Pre-Algebra and Level 3 or 4 on the 8th grade Math FSA.

The purpose of this course is to provide the foundation for more advanced mathematics courses and to develop the skills needed to solve mathematical problems. Topics should include sets, variables, structure and properties of real number system, first-degree equations / inequalities, relations, functions, graphs, systems of linear equations / inequalities, integral exponents, polynomials, rational numbers, radical expressions, quadratic equations and mathematical problems.

Course Title: Algebra 1A (1 credit)

1200370

AND Algebra 1B (1 credit)

1200380

Prerequisite: Students with an 8th grade FSA level 1 or 2 will be placed in 1A and 1B.

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. The critical areas, called units, deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions.

Course Title: Algebra I Honors

1200320

Prerequisite: Pre-Algebra and Level 5 on the 8th grade Math FSA.

The purpose of this course is to provide an in-depth study of algebraic concepts and processes that can be used to solve a variety of real-world mathematical problems. The content includes, but is not limited to: operations with the real number system, various methods of analyzing patterns, relations, functions, and operations with polynomials. Coordinate geometry, data analyzing concepts, graphs and algebraic solutions for inequalities and systems of equations will also be covered.

Course Title: Liberal Arts 1

1208300

Prerequisite: Level 1 or 2 score on the Algebra 1 EOC

The purpose of this course is to strengthen the mathematical skills required for passing the Algebra 1 EOC, required for Graduation. Topics shall include, but not be limited to, operations of real numbers; ratio and proportion; percent's, the algebra of sets; integers; polynomials; factoring; algebraic expressions; equations and inequalities; graphs; systems of linear equations and inequalities; quadratic equations and the geometry of angles, lines, polygons, similarity and congruence.

Course Title: Geometry

1206310

Prerequisite: A, B or C in Algebra I and pass Algebra I EOC

The purpose of this course is to emphasize critical thinking that involves the discovery of geometric concepts. Emphasis is placed on applying the deductive method of proofs to mathematical situations. Topics shall include logic and reasoning, the study of Euclidian geometry of lines, planes, angles, right triangle properties, similarity, congruence geometric inequalities, polygons and circles, area and volume and constructions.

Course Title: Geometry Honors**1206320**

Prerequisite : A or B in Algebra I Honors with teacher recommendation or A in Algebra I with teacher recommendation. Must have passed Alg. I EOC.

The purpose of this course is to give a rigorous in-depth study of geometry with emphasis on method of proof and the formal language of mathematics. Topics shall include structure of geometry; separation properties; angle concepts; triangles; quadrilaterals; proofs; perpendicularity and parallelism in a plane and in space; similar polygons; circles and spheres; constructions; area and volume; and coordinate geometry.

Course Title: Algebra II**1200330**

Prerequisite: A, B or C in Algebra I and Geometry with teacher recommendation .

The purpose of this course is to continue the study of structure of algebra and to provide the foundation for applying these skills to other mathematical and scientific fields. Topics shall include the review and extension of the structure and properties of the real number system, relations, functions and graphs, polynomials and rational expressions, quadratic equations and inequalities, functions, rational and irrational exponents, complex numbers, and word.

Course Title: Algebra II Honors**1200340**

Prerequisite: A or B in Algebra I Honors & Geometry Honors with teacher recommendation.

The purpose of this course is to present an in-depth study of the topics of Algebra II with emphasis on theory, proof, and derivation of formulas, as well as their application. Topics shall include algebraic structure, first degree equations in one and two variables solved algebraically and graphically: systems of equations and inequalities; functions and relations; polynomials and rational expressions; exponents and radicals, logarithms, complex numbers, conic sections, sequences and series, permutations, combinations and probability, and matrices.

SCIENCE

Course Title: Environmental Science**2001340**

Requirements: Placement based on FSA ELA and FCAT 2.0 Science Assessment

The purpose of this course is to provide students with a study of natural mutual relationships between organisms and other factors comprising their environment. Content should include biotic and abiotic environmental factors, food chains and webs, energy pathways and biological cycles, population dynamics, major world biomes, endangered species, major causes and controls of pollution, man's impact on the environment and analysis of ecosystems.

Course Title: Biology I Honors**2000320**

Prerequisite: Level 3, 4, or 5 on 8th grade Science FCAT 2.0 and Level 3, 4, or 5 on 8th grade ELA FSA.

The content will include in-depth study of scientific method, scientific measurement, laboratory safety and use of apparatus, cell biology, cell reproduction, basic principles of genetics, biological changes through time, classification and taxonomy, microbiology, structure and function of plants, animals, and of the human body, and ecological relationships.