



**PATHLIGHT**  
PREPARATORY

**LIGHTING THE PATH TO YOUR SUCCESS**  
**Learning Smarter. Aiming Higher.**  
**CHANGING LIVES.**

## PATHLIGHT PREPARATORY

### Mathematics Curriculum

### High School Course Description Guide (9<sup>th</sup> -12<sup>th</sup> Grade Levels)

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The policies, rules and regulations contained within this Pathlight Preparatory High School Mathematics Curriculum Guide are not to be considered exclusive and are subject to change and revision during the school year. Parents and students are advised to check the school website ([www.pathlightpreparatory.org](http://www.pathlightpreparatory.org)) for the most up-to-date version of the Pathlight Preparatory High School Mathematics Curriculum Guide.



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The Pathlight Preparatory High School Mathematics Curriculum Guide  
is to be used only by students, parents and instructors of Pathlight  
Preparatory

If you have any questions regarding the use of the Pathlight  
Preparatory High School Mathematics Curriculum Guide, contact your  
course instructor, guidance counselor, or administrator.

Every effort has been made to ensure that the information in this  
document is accurate; however, there may be errors or omissions as  
this guide is a work in progress and constantly being updated.

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## WELCOME

Welcome to Pathlight Preparatory. We are delighted that you are considering Pathlight Preparatory (PP) and look forward to the opportunity to work with you and your family and establishing a culture of collaboration and teamwork.

Pathlight Preparatory (PP) published assorted material and resources are designed to educate prospective families about the unique advantages of the Pathlight Prep experience and to assist parents in making an informed decision. As a part of our admissions process, PP, we strive to get to know our student-applicants as exceptional individuals with unique characteristics, interests, strengths and talents.

Pathlight Preparatory (PP) seeks students who have the inner drive to benefit most from attending Pathlight Prep, to attain their intellectual and athletic pursuits and who will contribute to the well-being of our school culture. Indeed, shaping a well-rounded and talented student body creates a community where education and athletics does not end at a specified timeframe. At Pathlight Prep, we all collaboratively work each day to ensure that our students develop through a vibrant and dynamic educational and athletic experience.

Selecting Pathlight Preparatory as a viable alternative educational option signifies becoming a part of a dynamic and spirited collaborative community. At Pathlight Prep, we integrate our challenging academic curriculum with a multitude of athletic, sport-specific skill development and training opportunities to discover and nurture individual interests.

On the first day of each school year, students are encouraged to strive to reach their intellectual and athletic potential in order to mature into well-rounded, socially responsible lifelong learners. Through the course of our students' academic and athletic pursuits, Pathlight Prep students shall be guided, engaged, and challenged by instructors, coaches, trainers, and mentors whose primary objective shall be to shape character, elevate learning, and further enhance athletic fitness prowess. It is this dedication to our students' moral, ethical, and inspirational formation that resonates in all aspects of our campus life, and shall differentiate Pathlight Prep from every other local, national, and international educational institution.

We encourage families and students to explore our website to begin learning more about our campus and community. Our website will offer you a glimpse at the depth of our academic and social/emotional wellness programs, however there simply is no better way to get a sense of a school's culture and atmosphere than through a visit and tour of our Pathlight Prep campus.

We hope you will have an opportunity to contact us and schedule a tour of our campus, Please, let us know how we can be of service

We look forward to meeting you and introducing you TEAM PATHLIGHT PREP!

## Letter from School Administration

Each moment of each passing day, I ask myself, what really matters in the grand scheme of things?

I guess as the person responsible for the oversight of our school, one would expect that the importance of obtaining excellent grades would be the dominant theme of this introductory letter, but in truth, the responsibility of this job, the various obstacles that some of our students, families, and faculty have encountered over the years, and the various conversations I have had with one another, have made me ever more aware that in the grand scheme this has always been an aspect of education that has been expected without question. Indeed, achieving academic excellence has always been the standard, by which success has been measured.

But in these unsteady times, I have come to the realization what truly is important is keeping perspective of events in our lives that really make life worthwhile. Certainly, Pathlight Preparatory should not only serve to educate our students, but to transform into a permanent visible fixture in our surrounding community, one that will symbolize and foster encouragement and determination.

I have realized through the course of my life that one of the most effective forces in our lives that allows us to persevere is the experience of encouragement. Encouragement is an integral part towards achieving educational success, because it is life-altering. Not only for our students receiving it, but also for our instructors and parents providing it.

At times, Pathlight Preparatory represent a home away from home to many of our students, and we must embrace encouragement in our own and our students' lives by:

- **Providing encouragement to others:**

Never pass up the opportunity to encourage others. The simplest of words of encouragement can have a profound effect on someone's life. When we encourage our students, we are giving them a reason to pursue their goal or dream. We are saying you "get it". It's not some superficial dream wandering aimlessly in their heads. It's real. It has worth. Then, when the opportunity to shine comes their way, they've got the confidence to move forward and go for it. THEY BECOME INSPIRED. By showing your support to our students, you can be the one to open the door to a child's dream. If you see a student with a unique talent, point it out and lift it up. If you've learned something, share it.

- **Accepting encouragement from others:**

It is important that our students are able to accept and acknowledge encouragement from others. Hence, this will assist our students in building their level of confidence, as they embark on accomplishing their goals and aspirations. As students accept the encouragement from others, there is something in this process that may not be easily realized. For, it is not an "I" against a "Them" mentality. For, it is the power of what "We" can all accomplish together, against all odds. When our students accept encouragement from others, they are showing their commitment to their unique potential. Accepting the encouragement that people offer as an unconditional "gift" that it truly is can have a profound effect on a student's level of compassion and humility.

- **Believing in the potential of becoming the best "I" can be:**

Once our students have truly accepted and absorbed it, and owned it as true, then they are on the way to believing in themselves. Sometimes that's hard to do when any of our students are facing social rejection, encountering academic challenges, and life events aren't perfectly fitting together as hoped... just yet. Students can embrace and accept encouragement and believe in their potential by encouraging students to partner with someone who can hold up a mirror to their thoughts, plans, goals, hopes, and dreams. Indeed, when our students are affirmed, it is empowering. And then, it becomes infectious. It feels great receiving it, so before long each student wants another student to feel the way he or she does: "PAYING IT FORWARD." GOD BLESS

Sincerely,

**Pathlight Preparatory Administration**

# About Pathlight Preparatory

## Why Pathlight Prep?

Our teacher-directed classroom discussions and instructions are supported by a collaborative student-centered philosophy and personalized learning and training approach. This remains at the forefront of Pathlight Preparatory (PP) mission which appeals to students who prefer a more holistic personal learning and training experience.

- **Personalized Student Success Plan**

Applying a personalized student success plan that encompasses a holistic approach and which recognizes that a significant amount of learning also occurs during after-school hours

- **Integrated Learning Option**

Flexibility to personalize teacher-directed classroom instructions on campus with technology integration that would improve student learning experiences, processes, and shared outcomes.

- **Small Class Sizes**

Individual attention from a faculty of industry experts

- **Financial Assistance Services and Support**

Grants, scholarships, and financial aid available for students who qualify.

- **Skill-Building Instruction**

Practical learning experiences to prepare for the modern workplace

- **In-Demand Socio-Emotional Training Programs**

Quality-Driven training provided by a united professional mentors, counselors, and instructors.

## Collaborative Learning Community

Pathlight Preparatory Collaborative Learning Community invites educators to examine what, where and how students should learn in order to thrive in a dynamic world. It invites administrators and community partners to reflect about the purpose of education in the 21st century and envision practical ways to promote relevant, deep and engaging learning for all. When teachers embrace learning for the future, they nurture expert thinking, collaboration, teamwork, and entrepreneurship. They foster intercultural understanding, environmental stewardship and global citizenship. They invite students to understand complex problems, create quality work and express themselves through traditional and new media-ultimately preparing students to live ethical and reflective lives in their rapidly changing communities.

Our Collaborative Learning Community allows a parent and student to have an opportunity to work collaboratively and with an interdisciplinary team comprised of educators, administrators, and student support services personnel to design an individualized instructional delivery plan that is both student-centered and one that complements the student's unique learning style(s). Our goal is to ensure student success by believing in our student's potential, while at the same time fostering a culture that embraces "zero tolerance for failure and mediocrity." This is accomplished by providing our students a learning environment that is rich with opportunities for success. Indeed, "our students' academic failure is our failure."

## Mission

The Mission of Pathlight Preparatory is to value diversity, inclusion, and embrace life-long collaborative partnerships among students, teachers, and parents by fostering an optimal learning environment where students can access effective instructional modalities that nurture independent critical thinking and intrinsically motivate life-long learning that is both academically challenging and responsive to students' social and emotional needs, thereby promoting and reinforcing core values that prepare students to successfully meet the challenges of a changing world in the Twenty-First Century.

## Vision

The Vision for Pathlight Preparatory is to provide an engaging and relevant curriculum to students. Student individual learning needs are identified through ongoing formative assessments in order guide appropriate and effective instructional intervention strategies that would reveal students' full potential. Pathlight Preparatory will offer a comprehensive system of supports to parents and students in order to ensure students are on track with satisfying graduation requirements and are college and career ready.

- Pathlight Preparatory Instructors believe that all students have the potential to meet or exceed academic standards. Parents, teachers, staff, and administrators work together as a professional and collaborative learning community to evaluate instructional modalities with the focus on improving student performance.
- Pathlight Preparatory Students are creative and complex thinkers, effective communicators, community/global participants, and empowered independent learners.
- Pathlight Preparatory Families work collaboratively with educators to provide the best instructional practices and strategies for their children. Together, they review student formative assessment results and collaborate on a course of instructional modalities that engages and inspire students to reach their full potential.
- Pathlight Preparatory Community of stakeholders are proactively involved and invested in support of our collaborative instructional intervention strategies to provide the best practices to ensure the success of each student. The strong connections and communication amongst educators, students, families, and the community foster an effective foundation or framework for which our strategies are established.

## Purpose

The purpose of Pathlight Preparatory is to provide an educational environment that equips students to lead fulfilling lives through learning, leadership, service, a commitment to high moral character, and spiritual enlightenment.

## Core Values

Pathlight Preparatory Core Identity is empowered by collaboration, thus our five (5) core values are:

1. **Sustainable Quality** - Our effective collaborative instructional intervention strategies have the flexibility to create a student-centered approach to learning.
2. **Student-Centered Learning** - Students of diverse backgrounds find themselves fully engaged in the learning process, as they are supported and guided by our educators to discover effective instructional intervention strategies that positively enhances their learning experience.
3. **Integrity** - Our collaborative instructional interventions are held to the highest standards of curriculum excellence so that students thrive.
4. **Innovation for Every Student** - The uniqueness of every student is matched by our instructional intervention strategies that are always innovating and advancing for the continuous improvement of the student learning experience.
5. **Collaborative Partners** - We strengthen our collaborative relationships between educators, students, families, and community in order to create an effective learning culture that supports everyone by fostering an actively engaged school community that is aware of and appreciates multiculturalism and the multi-faceted aspects of our unique identity that each of us brings forth.

## Guiding Principles

Pathlight Preparatory Six (6) Guiding Principles are:

1. Students should feel a personal connection to the Pathlight Preparatory learning experience. School guidance programs are important, as are internships and lessons customized to each student's learning style.
2. All students should be held to high academic and personal standards.
3. Students must believe that what they learn is relevant to their lives; students should be able to personalize their learning.
4. Educators should be facilitators, mentors, and coaches in the learning process. Educators MUST be proactive NOT Reactive in identifying and addressing students' strengths and challenges.
5. Each student's learning style(s) should be assessed, monitored, documented, and enhanced.
6. Obtained Data and Attained Milestones about a student's learning should be used to modify or improve his or her learning experience or instructional modality(ies) in order to enhance its overall effectiveness. Data MUST always be utilized to drive continuous school improvement.



## Diversity & Inclusion at Pathlight Preparatory

Pathlight Preparatory (PP) encourages and promotes critical thinking, dialogue, understanding and awareness in a collaborative atmosphere which students can exchange ideas. Pathlight Prep is proud of our school culture and of the ways in which we are a diverse and inclusive community. Diversity and inclusion is fundamental to the mission of Pathlight Prep. We reach out to embrace individuals of different races, ethnicities, faiths, socioeconomic circumstances and educational backgrounds. We seek students whose perspectives can contribute and broaden classroom discussions, athletic training and participation experience.

Pathlight Preparatory (PP) is committed to fostering an inclusive and diverse learning environment that continuously encourages values that recognizes our unique individuality to offer positive contributions to our united global community and our potential to achieve “excellence” through adversity.

Continuously guided by our mission as an independent teacher directed and student-centered learning environment and our core cultural principles where humility and respect are placed in the highest regard, Pathlight Preparatory (PP) embodies an environment where individuals from all backgrounds will not only feel a sense of belonging and connection, but thrive and be inspired to overcome life’s challenges.

### Diverse Faculty

Pathlight Preparatory (PP) is committed to attracting and retaining a culturally diverse instructional, coaching, and training staff of demonstrated professional excellence with an unwavering commitment to delivering an education of unsurpassed quality and breadth.

### Student Opportunities

Pathlight Preparatory (PP) admits students of any race, gender, color, religion, national or ethnic origin and does not discriminate on the basis of any of these categories or any other category protected by law in the administration of its educational policies, admissions policies, scholarship and financial aid program, athletic and other school-administered programs.

We are all collectively committed to admitting students who demonstrate academic merit, strong character, and great potential, and who contribute to a vibrant, talented, balanced, and diverse student body, reflecting a wide range of backgrounds and experiences.

## Educational Model

Pathlight Preparatory (PP) Educational Model supports the framework of Inquiry-Based Learning which relies upon the idea that students are capable of learning and mastering course content by investigating scenarios and problems, and through social experiences. Rather than having to memorize information from printed materials, instructors (teachers) direct, engage, and encourage their students to conduct investigations that would stimulate their curiosity, assist them to broaden their knowledge base and develop their critical and creative skills, as well as their mental frames of reference or point of views.

It's important to remember that inquiry-based learning is not a technique or practice per se, but an ever-evolving process that has the potential to increase the intellectual engagement and deep understanding of learners, encouraging them to:

- Develop their questioning, research and communication skills;
- Collaborate outside the classroom;
- Solve problems, create solutions, and tackle real-life questions and issues; and
- Participate in the creation and enrichment of ideas and knowledge.

### The Five (5) Stages of Inquiry-Based Learning

Pathlight Preparatory (PP) Inquiry-Based Learning includes the following five (5) stages:

1. Ask questions;
2. Probe (examine) into various situations;
3. Conduct analysis (investigations) and provide descriptions;
4. Communicate findings, verbally or in writing; and
5. Think about the information and knowledge obtained.

### The Four (4) Principles of Inquiry-Based Learning

There are four (4) principles that govern Pathlight Preparatory (PP) Inquiry-Based Learning and can be summarized as follows:

- **Principle 1**  
Students are in the center of the entire process, while instructors, resources and technology are adequately organized to support them.
- **Principle 2**  
All learning activities revolve around information-processing skills.
- **Principle 3**  
Instructors facilitate the learning process, but also seek to learn more about their students and the process of inquiry-based learning.
- **Principle 4**  
Emphasis is placed on evaluating the development of information-processing skills and conceptual understanding, and not on the actual content of the field.

## The Four (4) Forms of Inquiry

There are four (4) forms of inquiry that are commonly used in inquiry-based instruction:

### 1. Confirmation Inquiry

Students are provided with a question and method of which the end result is already known. The goal is to confirm or validate the results. This enables students to reinforce any of their already established ideas, and to practice their investigative skills.

### 2. Structured Inquiry

Learners are given the question and the method of achieving the result, but the goal is to provide an explanation that is already supported by the evidence gathered during and through the investigative process.

### 3. Guided Inquiry

Students are only given a question. The main goal is to design the method of investigation and then test the question itself. This type of inquiry is not typically as structured as the previously mentioned forms.

### 4. Open Inquiry

Students are instructed to form their own questions, design investigative methods, and then carry out the inquiry itself. They must present their results at the end of the process.

In an instructional setting, inquiry-based learning can give instructors (teachers) the opportunity to allow students to fully explore problems (conflicts - dilemmas) and scenarios, so that they can learn from not only the results, but also the process itself. Students are encouraged to ask questions, explore their environments, and obtain evidence that supports claims and results, and design a convincing argument regarding the manner on how the end results are reached.

## The Utilization of a Two-Part Approach

### Part I. Socratic Method of Teaching and Inquiry: *Fostering Critical and Analytical Thinking*

The Socratic Method of discussion facilitates a student's quest for understanding by requiring him or her to answer questions on his or her own, to ponder the validity of what others have said or written, and (not the least of which) to give reasoned support for his or her own opinion to the other students in the group.

It is not enough simply to "learn" facts, to memorize lessons, or to recite lectures. To know truly, to seek wisdom, one must work toward understanding. If the question of "what" leads us to see what we do and do not know, then the question "why" leads us to understand our world in a holistic, fundamental manner.

Within the framework of scientific skepticism, the process of critical and analytical thinking involves:

- a. acquiring information,
- b. analyze information,
- c. evaluate information,
- d. reach a well-justified conclusion or answer,
- e. explain one's conclusion, and
- f. restructure one's thinking

Part of critical and analytical thinking goes beyond informal logic, for it includes the assessment of:

- beliefs,
- identification of bias,
- distortions,
- ethics,
- misinformation,
- prejudice,
- propaganda, and
- self-deception

We believe in focusing more on teaching our students critical and analytical thinking skills, intellectual standards, and cultivating intellectual traits such as, intellectual humility, intellectual empathy, intellectual integrity, and fair-mindedness than on memorizing facts by rote learning. The ability for our students to reason and analyze logically will survive long after the retention of memorized facts are lost.

## **Part II. Aristotle's Modes of Persuasion: *Integrating Effective Speaking and Writing***

Socratic Method of education of a student will also depend on Aristotle's three-part process training of the mind or modes of persuasion:

**First**, a student absorbs knowledge - information and language mechanics (grammar/structure) that systematically constructs the foundations for logical reasoning (The Development of the *Logos*).

**Second**, the student develops the skills to utilize the knowledge - information and language mechanics (grammar and structure) that has been learned in order to think through arguments or engage in dialects that result in the development of one's unique character or identity (The Development of the *Ethos*).

**Lastly**, through the exposure of various interactions and experiences the student learns to express him or her-self through the use of one's affect, feelings or emotions as distinguished from cognition, thought, or action. As a result, the process of a student's interaction, manipulation, and application of knowledge then, becomes clearly defined (The Development of the *Pathos*).

## **Collaborative Active Learning**

The focus of Pathlight Preparatory (PP) is Collaborative Active Learning. We understand collaborative active learning in a broad sense to include active classroom activities that embody three principles.

Pathlight Preparatory (PP) Collaborative Active Learning three (3) principles or activities are:

- Unbiased-Balanced. Everyone in the collaboration is expected to contribute, which emphasizes the value of different knowledge, perspectives, and skill sets.
- Discussion-Based. The involvement of all the collaborators necessitates their interaction, which opens their horizons to new ideas and requires communication.
- Inquiry-Driven. Collaborative Learning encourages students to ask questions and to consider a variety of approaches to problems

# Instructional Design

## Collaborative Learning Activities Support Spaces (CLASS)

Pathlight Preparatory (PP) has made a firm commitment to the improvement of teaching quality. We believe that students learn more and fail less when active learning strategies are used. To this end, a Collaborative Learning Activities Support Spaces (CLASS) that facilitate collaborative active learning have been created.

In these learning spaces, faculty members utilize innovative teaching and learning strategies that promote higher order thinking that leads to better understanding and improved ability to transfer knowledge to other applications and functions. We believe that these learning spaces are an important component of PP's commitment to continuous school improvement and culture change because numerous research studies provide significant evidence that active engagement (learning) is critical to the success of students.

The Collaborative Learning Activities Support Spaces (CLASS) shall facilitate and support the basic aims of Pathlight Preparatory's overall mission and purpose:

1. Instruct students on the principles of Collaborative Active Learning.
2. Teach students how to collaborate through applications in their classes.
3. Encourage students to value and appreciate collaboration.
4. Improve student learning through Collaborative Active Learning.
5. Make Collaborative Active Learning a central feature of PP's educational aims and academic culture.

## Suitability of Instructor-Directed Courses for Collaborative Learning Activities Support Spaces (CLASS)

The Collaborative Learning Activities Support Spaces (CLASS) feature many unique characteristics that assist to support outstanding learning environments.

All of the Collaborative Learning Activities Support Spaces (CLASS) shall attempt to include the following characteristics:

- round or rectangular tables with casters for 6-8 students that instructors and learning assistants can access;
- adjustable height swivel chairs;
- projectors/screens and monitors throughout the room to ensure that all students have a good view of the materials being projected;
- portable/swivel dry erase boards with casters;
- tabletop whiteboards for each table;
- enhanced networks to accommodate courses with heavy use of technology;
- ample power outlets at the tables or around the perimeter of room; and
- sound-absorbing carpet and a splash of color on an accent wall to create an inviting learning environment.

"Pathlight Preparatory (PP) students and faculty working collaboratively to explore opportunities and discover solutions in pursuit of knowledge and love of learning."

# Core Curriculum

## Purpose:

The primary focus behind Pathlight Preparatory core curriculum is to prepare PP students for academic success in college and beyond. In line with our PP Mission and Philosophy, this goal is achieved through a balanced instructor-directed technology enhanced core curriculum. Curricular paths provide for individualized programs of study that are developed on rigorous and relevant courses. An experienced, dedicated, and diverse faculty of instructors collaborating with families to provide a student-centered comprehensive learning experience. The Pathlight Preparatory core curriculum is designed to develop academic potential and to foster inquiry, creativity, scholarship, and a thirst for knowledge.

With this in mind, Pathlight Preparatory (PP) emphasis is not only on course content matter, but more importantly on the awe-inspiring process by which one "struggles to conquer the elusive truth within, by embracing the love of learning." Hence, the PP core curriculum has been thoughtfully designed to develop academic potential and to foster inquiry, creativity, scholarship, and a lifelong love of learning. At PP, we all seek to form students who are life-long critical and creative thinkers, who grow in their understanding of content within a global context rather than fact-finding in isolation, who are called to ask critical questions, and who are ultimately called to act as life-changing leaders or agents of change within a diverse global community.

Indeed, rather than passively acquiring information and predefined explanations, students actively engage in the collaborative learning process. Instructors (teachers) actively involve and inspire students in the art of training one's mind on "how to learn, think, and create." Our core curriculum places an emphasis on teamwork, collaboration, deep understanding of content, analysis and synthesis, and the ability to apply what is learned in a multitude of challenging situations. At Pathlight Prep, reflection, action, and cooperation are key components of our comprehensive learning experience.

Pathlight Preparatory (PP) is committed to keeping class sizes small for the benefit of all learners by allowing more frequent and regular teacher to pupil interaction. All Pathlight Prep students are expected to participate in the full academic program unless a student's documented academic needs call for a modified program.

## Method:

Academic excellence is expected of all students at Pathlight Prep. Our learning environment fosters this excellence by creating a nurturing, diverse environment that celebrates the value and dignity and humility of each person. Into that environment Pathlight Prep has placed a rigorous curriculum that promotes the growth of the whole child, develops higher order reasoning skills and prepares students for a lifetime of learning.

Pathlight Prep incorporates many teaching strategies in an attempt to engage the broad spectrum of learners that we encounter. All grade level skills are developed in a spiral curriculum format where skills are introduced, developed and expanded in each grade level. These skills include standard literacy and numeracy skills as well as higher order analysis and synthesis. We also devote time to the students' executive functioning (organizational and planning) skills and develop their ability to present and communicate clearly.

In addition, technology will be taking on an increased role in the instruction of our students. All course content will integrate some level of technology into an instructor's delivery of course content. Pathlight Prep Instructors will be utilizing research and standard based course content and robust learning management delivery platform that has the capacity to support personalized, project-based, and master-based teacher-directed student collaborative learning activities, as well as other effective technological education applications to disseminate, support, and comply with their course content objectives.

Pathlight Prep student cumulative academic progress and course-specific content mastery is tracked by administration and individual course instructors through various assessment techniques and the entire school participates in standardized testing yearly utilizing the Stanford Achievement (10th Edition) to measure AYP (Adequate Yearly Progress) or year over year growth.

**"No problem can withstand the assault of sustained thinking."**

- Voltaire (François-Marie Arouet)

# Standard High School Graduation Requirements:

High School Graduation Credit Checklist: CORE CLASSES and ELECTIVES	
Subject (Courses)	Carnegie Units (CREDITS) REQUIRED
<b>English/Language Arts:</b> 1 credit (unit) English 1 1 credit (unit) English 2 1 credit (unit) English 3 1 credit (unit) English 4	4.00
<b>Mathematics:</b> <i>At or Above the Algebra I Level</i> 1 credit (unit) Algebra I 1 credit (unit) Algebra II 1 credit (unit) Geometry 1 credit (unit) from the among the following Advanced Math Courses: Pre-Calculus, Calculus, or Math for College Readiness	4.00
<b>Science: Natural Science</b> <i>Minimum of three (3) credits are required from the following available courses:            Please note that Biology 1 is a mandatory course.</i> 1 credit (unit) Biology 1 (Mandatory)      1 credit (unit) Environmental Science 1 credit (unit) Marine Science 1            1 credit (unit) Physical Science 1 credit (unit) Chemistry 1                    1 credit (unit) Anatomy & Physiology <b>Please Note:</b> At least two credits (units) must have a laboratory component.	3.00
<b>Social Studies (Science):</b> 1 credit (unit) World History 1 credit (unit) United States History ½ credit (unit) United States Government ½ credit (unit) Economics with Financial Literacy	3.00
<b>Health:</b>	0.50
<b>World Languages:</b> MUST BE TAKEN SEQUENTIALLY IN THE SAME LANGUAGE <i>* Required to increase your chances for acceptance to a 4-year College and/or University</i> <i>** Required to qualify for the Bright Futures Scholarship Program</i> 1 credit (unit) Chinese 1, French1, German 1, Greek 1, Italian 1, Latin1, French 1, Portuguese 1, Spanish 1 1 credit (unit) Chinese 2, French 2, German 2, Greek 2, Italian 2, Latin 2, French 2, Portuguese 2, Spanish 2	2.00
<b>Fine and Performing Arts, Social Sciences, Speech and Debate, Practical Arts, and/or Physical Education:</b> Personal Fitness: Strength & Conditioning, Team Sports a and/or Individual Sports	1.50
<b>Additional Courses:</b> Students MUST choose six (6) additional credits from available core and/or non-core courses to achieve the maximum 24.00 credits required to satisfy Pathlight Preparatory High School Course Graduation Requirements.	<b>6.00</b>
<b>GPA: Students must earn a 2.0 grade point average on a 4.0 scale.</b>	
<b>Total:</b>	<b>24.00</b>

## Scholar High School Graduation Requirements:

High School Graduation Credit Checklist: CORE CLASSES and ELECTIVES	
Subject (Courses)	Carnegie Units (CREDITS) REQUIRED
<b>English/Language Arts:</b> 1 credit (unit) English 1 1 credit (unit) English 2 1 credit (unit) English 3 1 credit (unit) English 4	4.00
<b>Mathematics:</b> <i>At or Above the Algebra I Level</i> 1 credit (unit) Algebra I 1 credit (unit) Algebra II 1 credit (unit) Geometry 1 credit (unit) from the among the following Advanced Math Courses: Pre-Calculus, Calculus, or Math for College Readiness	4.00
<b>Science: Natural Science</b> <b>Minimum of three (3) credits are required from the following available courses:</b> <b>Please note that Biology 1 is a mandatory course.</b> 1 credit (unit) Biology 1 (MANDATORY)      1 credit (unit) Environmental Science 1 credit (unit) Marine Science 1            1 credit (unit) Physical Science 1 credit (unit) Chemistry 1                    1 credit (unit) Anatomy & Physiology <b>Please Note:</b> At least two credits (units) must have a laboratory component.	4.00
<b>Social Studies (Science):</b> 1 credit (unit) World (Human) Geography 1 credit (unit) World History 1 credit (unit) United States History ½ credit (unit) United States Government ½ credit (unit) Economics with Financial Literacy	4.00
<b>Health:</b>	0.50
<b>World Languages: MANDATORY</b> MUST BE TAKEN SEQUENTIALLY IN THE SAME LANGUAGE MANDATORY <i>* Required to increase your chances for acceptance to a 4-year College and/or University</i> <i>** Required to qualify for the Bright Futures Scholarship Program</i> 1 credit (unit) Chinese 1, French1, German 1, Greek 1, Italian 1, Latin1, French 1, Portuguese 1, Spanish 1 1 credit (unit) Chinese 2, French 2, German 2, Greek 2, Italian 2, Latin 2, French 2, Portuguese 2, Spanish 2	2.00
<b>Fine and Performing Arts, Social Sciences, Speech and Debate, Practical Arts, and/or Physical Education:</b> Personal Fitness: Strength & Conditioning, - Team Sports and/or Individual Sports	1.50
<b>Additional Courses:</b> Students MUST choose four (4) additional credits from available core and/or non-core courses to achieve the maximum 24.00 credits required to satisfy Pathlight Preparatory High School Course Graduation Requirements.	<b>4.00</b>
<b>GPA: Students must earn a 3.0 grade point average on a 4.0 scale.</b>	
<b>Total:</b>	<b>24.00</b>



# High School Diploma Designations and Endorsements:

## **I. Standard Designation**

### **Eligibility Requirements:**

1. Minimum Cumulative GPA (Grade Point Average): 2.00
2. Test Scores: Standardized Test Stanines  $\geq 4$  (SAT 10)
3. Core Courses: Required courses taken at ANY Level

## **II. Scholar Designation**

### **Eligibility Requirements:**

1. Minimum Cumulative GPA (Grade Point Average): 3.00
2. Test Scores: Standardized Test Stanines  $\geq 5$  (SAT 10) Service Hours: 50 hours
3. Test Scores: Standardized Test Stanines  $\geq 6$  (SAT 10) Service Hours: 25 hours
4. Core Courses: Required courses taken at ANY Level

### **Scholar Designation Endorsements:**

#### **A. Scholar MERIT Endorsement**

##### **Eligibility Requirements:**

1. Minimum Cumulative GPA (Grade Point Average): 3.00
2. Service Hours: 75 hours
3. Test Scores: Standardized Test Stanines  $\geq 7$  (SAT 10)
4. Test Scores: SAT- 1170 (Math/Verbal) OR ACT – 26 (Composite Score)
5. Core Courses: Required courses taken at ANY Level

#### **B. Scholar HONORS Endorsement**

##### **Eligibility Requirements:**

1. GPA (Grade Point Average): 3.50 Minimum weighted in core classes ONLY
2. Service Hours: 100 hours
3. Test Scores: Standardized Test Stanines  $\geq 7$  (SAT 10)
4. Test Scores: SAT- 1290 (Math/Verbal) OR ACT – 29 (Composite Score)
5. Core Courses: Required courses must ALL be taken at ANY Level

# Assessments

## Advanced Placement (AP)

Pathlight Preparatory will be offering Advanced Placement courses in the following subjects: Biology, Calculus AB, Calculus BC, Chemistry, Computer Science, English Literature, English Language, Environmental Science, European History, French Language, Government and Politics: Comparative, Government and Politics: U.S., Latin: Vergil, Macroeconomics, Microeconomics, Music Theory, Physics B, Psychology, Spanish Language, Statistics, Drawing/Studio Art, U.S. History, and World History. Juniors and seniors are advised to take no more than three AP courses in any given semester. Students must apply and be accepted into an Advanced Placement course. An Advanced Placement guide with specific information about prerequisite courses, requirements, and the application dates and process is available online and is distributed before students apply.

## PSAT

The Preliminary SAT (PSAT) is a preparatory test for the SAT. It is designed to help students identify strengths and weaknesses in preparing for their last two years of high school, as well as for the SAT. The PSAT is administered to all 10<sup>th</sup> and 11<sup>th</sup> grade students in October. Ninth grade students interested in 10<sup>th</sup> grade AP are required to take the test, but they must register through the main office and pay a small fee. The PSAT must be taken in 11<sup>th</sup> grade for students to qualify for National Merit and National Achievement scholarships.

## SAT

The SAT is generally taken by 11<sup>th</sup> and 12<sup>th</sup> grade students applying to college. The test is designed to measure both verbal and quantitative reasoning skills and is used to predict a student's college performance. Each section of the SAT is scored on a scale of 200—800, with two writing sub-scores for multiple-choice and the essay. A perfect score is 2400. It is administered seven times a year. The SAT score is accepted for admission to the majority of colleges. For more information and a list of testing dates and locations, visit [www.collegeboard.com](http://www.collegeboard.com). Pathlight Preparatory High School CEEB CODE: **101-151**

## ACT

The American College Test (ACT) may also be taken by 11<sup>th</sup> and 12<sup>th</sup> grade students who wish to apply to college and is designed to measure a high school student's general educational development and ability to succeed in college. The test covers five subject areas: English, Math, Reading, Science and an optional writing test. Each subject area is scored with a composite score for the entire test ranging from 1 - 36. This test is becoming more widely accepted as a college admission test. For more information and a list of testing dates and locations, visit [www.act.org](http://www.act.org). Pathlight Preparatory High School CEEB CODE: **101-151**

## SAT 10 (Stanford Achievement Test - 10<sup>th</sup> Edition)

The SAT-10 or Stanford Achievement Test, 10<sup>th</sup> Edition is a nationally recognized exam. The testing is used to provide achievement scores for students, teachers, and parents to better understand how well students perform in Language Arts, Reading, Math, Science and Social Sciences.

## Stanford Achievement Test Series, Tenth Edition (Stanford 10, SAT-10)

- **Purposes:**
  - To guide teaching and learning toward high achievement standards.
  - To measure performance on standards.
- **The multiple-choice assessment will help our instructors to find out what our students know and are able to do.**
  - Administrators will obtain reliable data to evaluate progress toward meeting the challenges set forth by the No Child Left Behind Act and national and state standards and high expectations.
  - Teachers will identify and help children who are at risk of being left behind.
  - Parents will understand what their children know and can do and how they can help.

### Assessment Information

- Grades: Thirteen Levels - Kindergarten - Grade 12
- Subjects: Sounds and Letters, Word Study Skills, Word Reading, Sentence Reading, Reading Vocabulary, Reading Comprehension, Mathematics, Mathematics Problem Solving, Mathematics Procedures, Spelling, Language, Science, Environment, Social Science, Listening
- Include three types of questions: multiple choice, short answer, and extended response.
- Scores
  - Criterion-Referenced Scores – four levels of performance: below basic, basic, proficient, and advanced
  - Norm-Referenced Scores – based on K-12 population
- Reports
  - Student Report – Obtain information about students’ strength and needs.
  - Group Report – Analyze results by class, school, or district.
  - Home Report – Provide parents with easily understood information and suggestions for home activities.
  - (new) Performance Standards Report – Obtain standards based information about what students know and can do.

### Test Description

- Reading
  - Measure phonemic awareness, decoding, phonics, vocabulary, and comprehension.
  - Sounds and Letters - has an emphasis on phonemic awareness and phonics and closely reflects reading research findings.
  - Reading Comprehension - measures students’ comprehension within the framework of three types of materials or purposes for reading: literary, informational, and functional text.
- Mathematics
  - Measure state standards including number sense and operations; patterns, relationships, and algebra; geometry and measurement; and data, statistics, and probability.
  - Mathematics Procedures - measures the ability to apply the rules and methods of arithmetic to problems that require arithmetic solutions.
- Language
  - Measures students’ achievement in applying the principles that form effective writing.
- Spelling
  - Assesses objectives based upon the phonetic and structural principles taught at each grade level.

- Listening
  - Listening Vocabulary: students demonstrate recognition of the common meanings of spoken words encountered in various types of activities.
  - Listening Comprehension: assesses listening comprehension with dictated selections and questions that reflect the listening materials students hear in school and outside of the classroom.
- Science
  - The disciplines of life science, earth science, physical science, and the nature of science are represented.
  - Students must use reasoning skills throughout the test to reach answers. These skills include estimating, making simple calculations, seeking patterns, making observations, recognizing cause and effect, reading standard instruments, and drawing conclusions.
- Social Science
  - Social Science: measures the concepts important for the development of citizenship.
  - History: focuses on the history of the United States, the history of Western civilization, and the history of non-Western peoples and societies sharing our interdependent world.
  - Geography: tested according to the five themes of location, place, human-environment interaction, movement, and region.
  - Political Science: assesses the basic understanding of the U.S. system of government.

### **PERT (Postsecondary Education Readiness Test)**

The purpose of the P.E.R.T. is to determine accurate course placement based on the student's skills and abilities. The P.E.R.T. is aligned with the Postsecondary Readiness Competencies identified by Florida faculty as necessary for success in entry-level college credit coursework. The P.E.R.T. assessment system includes Placement and Diagnostic tests in mathematics, reading and writing.

### **Bright Futures Scholarship Program**

Florida's Bright Futures Scholarship is available to Florida residents who have demonstrated academic achievement. The scholarship provides money to assist students with the educational costs of attending college in Florida. A student must have a 3.0 cumulative grade point average or earn a numeric average of 80 in the core-curriculum units. All credits attempted in the core subjects will be averaged by using a true 4.0 scale to calculate eligibility for the Bright Futures scholarship.

**For additional information please visit:**

<https://www.floridastudentfinancialaidsg.org/>

## Curriculum Implications

### High School Diploma

High School Diploma is awarded to students who have completed all high school graduation requirements, which include required compulsory attendance, core course and non-core course credits, GPA, assessment, and high school course requirements.

#### Minimum Number of Core Course & Non-Core Course Credits Required for Grade Level Placement

Grade Level	Classification	Minimum Number of Credits Required to Enter	Minimum Number of Credits Required to be Completed Required Core and None Core Course Credits
9 <sup>th</sup> Grade	Freshman	Middle School Diploma Earned	06 credits
10 <sup>th</sup> Grade	Sophomore	06 credits	12 credits
11 <sup>th</sup> Grade	Junior	12 credits	18 credits
12 <sup>th</sup> Grade	Senior	18 credits	24 credits

### High School Credits Earned in Middle School

High School credit may be awarded for courses offered in the middle school grades that meet the following criteria:

- Must meet 9<sup>th</sup> thru 12<sup>th</sup> Pathlight Preparatory high school graduation requirements
- Must earn a grade of (2.00) 70 or better
- Must include mid-term and final examination grades OR Cumulative assessments.
- High School credits earned in middle school shall be counted in the required total units of study for middle school graduation.
- The high school credits earned in middle school will be posted on the student's high school transcript and will be counted towards required core courses and/or non-core courses.

## Grading Scale - Quality Point Value Earned Performance Descriptors

Besides each letter grade, quality points are awarded in order to indicate the overall academic performance level of a student's work in each of the identified criteria indicated above. The chart below presents the quality point values earned, as well as the converted equivalent (%) percentage grade ranges and performance descriptors.

Letter Grade	Quality Points Earned	% Percentage - Numerical Grade	Performance Descriptors
<b>A+</b>	4.00	97 - 100	Excellent Work
<b>A</b>	4.00	93 - 96	<i>Highly Effective</i>
<b>A-</b>	3.70	90 - 92	
<b>B+</b>	3.30	87 - 89	Very Good Work
<b>B</b>	3.00	83 - 86	<i>Effective</i>
<b>B-</b>	2.70	80 - 82	
<b>C+</b>	2.30	77 - 79	Good Work
<b>C</b>	2.00	73 - 76	<i>Satisfactory</i>
<b>C-</b>	1.70	70 - 72	
<b>D+</b>	1.30	67 - 69	Unsatisfactory Work
<b>D</b>	1.00	63 - 66	<i>Needs Improvement</i>
<b>D-</b>	0.70	60 - 62	
<b>E/F</b>	0.00	Below 60	Failed <i>No Credit</i>

**A (4.00 - 3.70) (90-100): Excellent Work. (Highly Effective)**

Student demonstrated extraordinary achievement relative to the level necessary to meet course requirements. Student performance was of the highest level. Student demonstrated excellence while meeting course objectives and was sustained throughout the course. Not only was the student's performance clearly and significantly above satisfactory, it was also of an independent and creative nature.

**B (3.30 - 2.70) (80-89): Very Good Work. (Effective)**

Student demonstrated achievement significantly above the level necessary to meet course requirements. Student performance was clearly very good and significantly above satisfactory fulfillment of course requirements, performance was also of a creative and an independent nature.

**C (2.30 - 1.70) (70 - 79): Good Work (Satisfactory)**

Student demonstrated achievement that meets the course requirements. Student performance was notable and more than adequate. Student performance was satisfactory fulfillment of course requirements, required intermittent monitoring and oversight, and it was of a minimally independent and creative nature.

**D (1.30 - 0.70) (60-69): Unsatisfactory Work (Needs Improvement)**

Student demonstrates achievement that barely meets the course requirements. Student performance has been slightly below satisfactory and was marginal in quality. No evidence of independency and creativity was evident. Student demonstrated unsatisfactory achievement in meeting course objectives, yet fulfilled a sufficient enough portion of the course objectives that repeating the course is not necessary unless required by the academic unit. No evident independent and creative nature was displayed

**.E/F (0.00 - 0.00) (Below 59): Failed (No Credit)**

Student demonstrates a failure to meet course requirements. The work of course objectives were either: (1) completed but not at a level of achievement that is worthy of credit, or 2) have not been completed and there was no agreement between the instructor and the student that the student would be awarded an "I" (incomplete).

**Other Grade Designations:**

**I (0.00): Incomplete.**

Grade assigned when due to unusual circumstances a small portion of a course, such as a term paper or final examination, has not been completed.

**IP (0.00): In-Progress Course.**

**NG (0.00): Grade Not Yet Available/Extended Course.**

Grade assigned for extended course which has not yet ended.

**NP (0.00) (TT): Not Pass.**

Student did not pass the course under the Pass/Not Pass policy.

**NR (0.00): Grade Not Yet Reported.**

Grade not submitted by instructor on time.

**P (0.00) (TP): Pass.**

Student passed the course under the Pass/Not Pass policy.

**W (0.00): Withdrew.**

Student withdrew from course without academic penalty.

**Achievement Recognition:**

**Principal's List:** Student must obtain a letter grade of "A" in all core and non-core academic areas.

**Honor Roll List:** Student must obtain a combination of letter grades of "A" and/or "B" in all core and non-core academic subject areas.





**PATHLIGHT**  
PREPARATORY

# CORE COURSES



# Mathematics

Four (4) Credits (Units) of English Are Required For:

- Standard Graduation Requirements
- Scholar Graduation Requirements

<b>Subject Area:</b>	<b>Mathematics</b>			
<b>Course Name:</b>	<b>Algebra 1</b>			
Course Code:	1200310			
Course Category:	Core Course			
Course Duration:	Per Semester:	Min. 67.5 hrs.	Full Year:	Min. 135 hrs.
Course Credits (Units):	Per Semester:	0.50 credits	Full Year:	1.00 credits
Pre-Requisite(s):	Recommended: M/J Math 3 (8 <sup>th</sup> Grade) OR Pre-Algebra			
Recommended Grade Level(s):	9 <sup>th</sup> Grade – 12 <sup>th</sup> Grade			

### Course Description

This course is a study of the topics of Algebra I designed to develop the algebraic concepts and processes that can be used to solve a variety of real-world mathematics problems. The content will include: properties of the real number system; varied means for analyzing and expressing patterns, relations and functions; variables, algebraic expressions and polynomials; geometric concepts; set operations; dimensional analysis; data analysis concepts and techniques; and varied solution strategies, algebraic and graphic, solutions for inequalities, linear and quadratic equations, and systems of equations. Calculators and computers will serve as instructional tools in concept development.

<b>Subject Area:</b>	<b>Mathematics</b>			
<b>Course Name:</b>	<b>Algebra 1 Honors</b>			
Course Code:	1200320			
Course Category:	Core Course			
Course Duration:	Per Semester:	Min. 67.5 hrs.	Full Year:	Min. 135 hrs.
Course Credits (Units):	Per Semester:	0.50 credits	Full Year:	1.00 credits
Pre-Requisite(s):	Recommended: M/J Math 3 (8 <sup>th</sup> Grade): Pre-Algebra - Grade of A or B			
Recommended Grade Level(s):	9 <sup>th</sup> Grade – 12 <sup>th</sup> Grade			

### Course Description

This course is a rigorous in-depth study of the topics of Algebra I designed to develop the algebraic concepts and processes that can be used to solve a variety of real-world mathematics problems. The content will include: structure and properties of the real number system; varied means for analyzing and expressing patterns, relations and functions; variables, algebraic expressions and polynomials; geometric concepts; set operations; dimensional analysis; data analysis concepts and techniques; and varied solution strategies, algebraic and graphic, for inequalities, linear and quadratic equations, and for systems of equations. Calculators and computers will serve as instructional tools in concept development.

<b>Subject Area:</b>	<b>Mathematics</b>			
<b>Course Name:</b>	<b>Algebra 2</b>			
Course Code:	1200330			
Course Category:	Core Course			
Course Duration:	Per Semester:	Min. 67.5 hrs.	Full Year:	Min. 135 hrs.
Course Credits (Units):	Per Semester:	0.50 credits	Full Year:	1.00 credits
Pre-Requisite(s):	Algebra 1 or Algebra 1 Honors			
Recommended Grade Level(s):	9 <sup>th</sup> – 12 <sup>th</sup> Grade			

### Course Description

This course is designed to continue the study of algebra and to provide the foundation for applying these skills to other mathematical and scientific fields. The content will include: structure and properties of the complex number system; sequences and series; relations; functions and graphs; varied solution strategies for linear equations, inequalities, and systems of equations and inequalities; quadratic, exponential, and logarithmic functions; and their applications; data analysis; reinforcement of geometric concepts, and probability. Calculators and computers will serve as instructional tools in concept development.

<b>Subject Area:</b>	<b>Mathematics</b>			
<b>Course Name:</b>	<b>Algebra 2 Honors</b>			
Course Code:	1200340			
Course Category:	Core Course			
Course Duration:	Per Semester:	Min. 67.5 hrs.	Full Year:	Min. 135 hrs.
Course Credits (Units):	Per Semester:	0.50 credits	Full Year:	1.00 credits
Pre-Requisite(s):	Algebra 1 or Algebra 1 Honors (Grade of an A or B)			
Recommended Grade Level(s):	9 <sup>th</sup> – 12 <sup>th</sup> Grade			

### Course Description

This course is a rigorous in-depth study of the topics of Algebra II with emphasis on theory, proof, and development of formulas, as well as their application. The content will include: structure and properties of the complex number system; sequences and series; relations; functions and graphs; varied solution strategies for linear equations, inequalities, and systems of equations and inequalities; conic sections and their applications; quadratic, exponential, and logarithmic functions; and the Binomial Theorem. Calculators and computers will serve as instructional tools in concept development.

<b>Subject Area:</b>	<b>Mathematics</b>			
<b>Course Name:</b>	<b>Geometry</b>			
Course Code:	1206310			
Course Category:	Core Course			
Course Duration:	Per Semester:	Min. 67.5 hrs.	Full Year:	Min. 135 hrs.
Course Credits (Units):	Per Semester:	0.50 credits	Full Year:	1.00 credits
Pre-Requisite(s):	Algebra 1 or Algebra 1 Honors			
Recommended Grade Level(s):	9 <sup>th</sup> – 12 <sup>th</sup> Grade			

### Course Description

The purpose of this course is to develop the geometric relationships and deductive strategies that can be used to solve a variety of real world and mathematical problems. The content will include Euclidean geometry of lines, planes, angles, triangles, construction and logic, and properties of circles, polygons, right triangle trigonometry, and reinforcement of algebraic concepts. Calculators and computers will serve as instructional tools in concept development.

<b>Subject Area:</b>	<b>Mathematics</b>			
<b>Course Name:</b>	<b>Geometry Honors</b>			
Course Code:	1206320			
Course Category:	Core Course			
Course Duration:	Per Semester:	Min. 67.5 hrs.	Full Year:	Min. 135 hrs.
Course Credits (Units):	Per Semester:	0.50 credits	Full Year:	1.00 credits
Pre-Requisite(s):	Algebra 1 or Algebra 1 Honors (Grade of an A or B)			
Recommended Grade Level(s):	9 <sup>th</sup> – 12 <sup>th</sup> Grade			

### Course Description

This course is designed to give a rigorous in-depth study of geometry with emphasis on methods of proof and the formal language of mathematics. The content will include the following: 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; coordinate geometry, and topology. Calculators and computers will serve as instructional tools in concept development.

<b>Subject Area:</b>	<b>Mathematics</b>			
<b>Course Name:</b>	<b>Pre-Calculus Honors</b>			
Course Code:	1202340			
Course Category:	Core Course			
Course Duration:	Per Semester:	Min. 67.5 hrs.	Full Year:	Min. 135 hrs.
Course Credits (Units):	Per Semester:	0.50 credits	Full Year:	1.00 credits
Pre-Requisite(s):	Algebra 2 (Algebra 2 Honors) and Geometry (Geometry Honors)			
Recommended Grade Level(s):	9 <sup>th</sup> – 12 <sup>th</sup> Grade			

### Course Description

This course is designed to strengthen and extend the student's knowledge of algebraic and trigonometric concepts and to prepare the student for calculus. The content will include mathematical induction, symbolic logic, Boolean and matrix algebra, probability and statistics, elementary functions and limits. Calculators and computers will serve as instructional tools in concept development.

<b>Subject Area:</b>	<b>Mathematics</b>			
<b>Course Name:</b>	<b>Calculus Honors</b>			
Course Code:	1202230			
Course Category:	Core Course			
Course Duration:	Per Semester:	Min. 67.5 hrs.	Full Year:	Min. 135 hrs.
Course Credits (Units):	Per Semester:	0.50 credits	Full Year:	1.00 credits
Pre-Requisite(s):	Pre-Calculus Honors			
Recommended Grade Level(s):	9 <sup>th</sup> – 12 <sup>th</sup> Grade			

### Course Description

This course is intended for students who have a thorough knowledge of college preparatory mathematics and elementary algebraic, trigonometric, exponential, and logarithmic functions. Topics from the AP course are presented with increased rigor and more applications in addition to other topics required by the IB higher level mathematics.

<b>Subject Area:</b>	<b>Mathematics</b>			
<b>Course Name:</b>	<b>Math for College Readiness</b>			
Course Code:	1200700			
Course Category:	Core Course			
Course Duration:	Per Semester:	Min. 67.5 hrs.	Full Year:	Min. 135 hrs.
Course Credits (Units):	Per Semester:	0.50 credits	Full Year:	1.00 credits
Pre-Requisite(s):	Algebra 2 (Algebra 2 Honors) and Geometry (Geometry Honors)			
Recommended Grade Level(s):	9 <sup>th</sup> – 12 <sup>th</sup> Grade			

### Course Description

The purpose of this course is to enhance and continue the study of mathematics after Algebra I, Algebra II, and Geometry designed to prepare students for college-level studies. The content will include graphing linear functions, quadratic functions, absolute value functions, radical functions and rational functions. Students will also be expected to solve equations containing these types of functions as well as performing operations on expressions and simplifying. Other topics will include inequalities, factoring polynomials, applied problems, and systems of equations. Students will participate in assessment for college readiness. Calculators and computers will serve as instructional tools in concept development.

<b>Subject Area:</b>	<b>Mathematics</b>			
<b>Course Name:</b>	<b>Advanced Algebra with Financial Applications</b>			
Course Code:	1200500			
Course Category:	Core Course			
Course Duration:	Per Semester:	Min. 67.5 hrs.	Full Year:	Min. 135 hrs.
Course Credits (Units):	Per Semester:	0.50 credits	Full Year:	1.00 credits
Pre-Requisite(s):	Algebra 2 (Algebra 2 Honors) and Geometry (Geometry Honors)			
Recommended Grade Level(s):	9 <sup>th</sup> – 12 <sup>th</sup> Grade			

### Course Description

The purpose of this course is to enhance and continue the study of mathematics after Algebra I, Algebra II, and Geometry, and to provide an understanding of financial applications, as well as provide additional tools to ready students for college-success. The content will include the following: explorations of functions, graphs (linear, exponential, and logarithmic), data analysis concepts and techniques, financial applications which include money and taxes, debt, budgeting, investments, mortgages, insurance, and financial planning. Calculators and computers will serve as instructional tools in concept development.