MENTORSHIP STEAM ACADEMY
COURSE CATALOG
2016-2017

EXPECT GREATNESS @ 212°

“EDUCATION IS FREEDOM”
ADMINISTRATION

Dr. Graysen Walles, CEO
Robert M. Webb Jr., Senior Principal
Keith Bradford, Freshman Academy Principal
Lisa Thrower, Director of Business Management
Dean of Discipline, Elva Jacobs
Cliff Lewis, Athletic Director

INTRODUCTION

The information in this brochure is important to both you as a student and your parents. In order for Mentorship Academy to provide you with the best possible education, you must take the responsibility of choosing subjects that will help you achieve your goals.

This guide will provide you with graduation requirements, scheduling requirements, course summaries and other important information.

We strongly advise all students to seek the counsel of their parents and their MA counselor and teachers before selecting courses for the coming year. Upperclassmen should be particularly careful that all graduation requirements are being met. Students in all grades are required to schedule eight classes.

All honors (H), dual enrollment (Dual), and advanced placement (AP) courses carry one extra quality point for students who earn grades of "C" or above. Those extra points are used to determine a student’s grade point average. **We strongly recommend that 9th grade students allow for adjustment to high school by scheduling no more than two honors classes for their first year. To be considered for honors, advanced, and/or upper level classes, ninth grade students must provide MA documentation of readiness or eligibility.**

COUNSELING

A counselor is assigned to students at Mentorship STEAM Academy to help them during their high school career. A student may schedule a conference with a counselor for any number of reasons: scheduling, career counseling, college and scholarship consulting, testing, written recommendations and references, and personal problems. Strict confidentiality is maintained except when there is imminent personal danger or threat to others.

Counselors are always available for consultation and guidance **BUT THE FINAL RESPONSIBILITY FOR MEETING GRADUATION REQUIREMENTS RESTS WITH THE STUDENT AND PARENTS.**

MINIMUM REQUIREMENTS FOR HIGH SCHOOL GRADUATION

Requirements are subject to change per state guidelines. See Louisiana Believes for changes/updates.

LA CORE 4 (INCOMING FRESHMEN 2008-2009 AND BEYOND)

Incoming 9th graders in 2008-09 and beyond will be enrolled in the LA Core 4 Curriculum.

**English**

4 Units
Shall be English I, II, III, and English IV

**Mathematics**

4 Units
Shall be Algebra I (1 unit), Geometry, Algebra II. The remaining unit shall come from the following: Algebra III, Advanced Math I, Calculus AB or a locally-initiated elective approved by BESE as a math substitute.

**Science**

4 Units
Shall be Biology and Chemistry The remaining units shall come from the following: Physical Science, Physics, Physics Dual, Biology II, Chemistry II, Environmental Science, or a locally initiated elective approved by BESE as a science substitute.

**Social Studies**

4 units
Shall be Civics and American History; two units from the following: World History, World Geography,

**Health Education**

½ unit
JROTC I and II may be used to meet the Health Education requirement provided the requirements in Section 2347 of Bulletin 741 are met

**Physical Education**

1 ½ units
Shall be Physical Education I and Physical Education II, or Adapted Physical Education for eligible special education students. A maximum of four units of Physical Education may be used toward graduation. The substitution of JROTC is permissible.

**Foreign Language**

2 units
Shall be 2 units in the same foreign language or 2 Speech courses

**Arts**

1 unit
Shall be Fine Arts Survey or 1 unit of Art, Music, Theatre Arts, or Applied Arts.

**Electives**

3 units

**TOTAL**

24 units

THE STATE BOARD OF ELEMENTARY AND SECONDARY EDUCATION (SBESE) GRADUATION EXIT EXAM POLICY STATES:

In addition to completing a minimum of 24 Carnegie Units of credit, students must meet assessment requirements below to earn a diploma:

Students must pass End-of-Course Tests in the following categories:

- Algebra I/Geometry
- English II/English III
- Biology/ American History

TOPS

Louisiana Tuition Opportunity Programs for Students is a comprehensive program of state scholarships and assistance programs. Specific courses, grade point average, ACT scores and other eligibility requirements are necessary for this program.

TOPS CORE CURRICULUM FOR THE OPPORTUNITY, PERFORMANCE AND HONORS AWARDS

FOR STUDENTS GRADUATING 2018 AND THEREAFTER

**ENGLISH = 4 Units**

1 Unit from the following: English III, AP English Language Arts and Composition, or IB English III (Language A or Literature and Performance)

**MATH = 4 Units**

Algebra I, Geometry, Algebra II (Integrated Mathematics I, Integrated Mathematics II, and Integrated Mathematics III may be substituted for the Algebra I, Geometry, and Algebra II sequence)

1 Unit from the following:

- Algebra III; Advanced Math - Functions and Statistics,
- Advanced Math - Pre-Calculus, Pre-Calculus, or IB Math Methods I (Mathematical Studies SL);
- Calculus, AP Calculus AB, or IB Math Methods II (Mathematics SL);
- AP Calculus BC; Probability and Statistics or AP Statistics; IB Further Mathematics HL; IB Mathematics HL

**SCIENCE = 4 Units**

Biology I, Chemistry, and 2 Units from the following:

- Earth Science; Environmental Science; Physical Science;
- Agriscience I and Agriscience II (one unit combined);
- Chemistry II, AP Chemistry, or IB Chemistry II;
- AP Environmental Science or IB Environmental Systems; Physics I, AP Physics B, or IB Physics I; AP Physics C: Electricity and Magnetism, AP Physics C: Mechanics, or IB Physics II; AP Physics I and AP Physics II; Biology II, AP Biology, or IB Biology II

**SOCIAL STUDIES = 4 Units**

1 Unit from the following:

- U.S. History, AP U.S. History, or IB U.S. History

½ Unit from the following:

- Government, AP U.S. Government and Politics: Comparative, or AP U.S. Government and Politics: United States

English I, II; from the following:

- Economics, AP Microeconomics, or AP Macroeconomics (one unit of Civics may be substituted for the two ½ Units above)

2 Units from the following:

- European History, or AP European History; World Geography, AP Human Geography, or IB Geography;
- World History, AP World History, or IB World History; History of Religion; IB Economics
FOREIGN LANGUAGE = 2 Units
Foreign Language, both units in the same language, which may include the following: AP Chinese Language and Culture, AP French Language and Culture, AP German Language and Culture, AP Italian Language and Culture, AP Japanese Language and Culture, AP Latin, AP Spanish Language and Culture, IB French IV, IB French V, IB Spanish IV, and IB Spanish V

ART = 1 Unit
1 Unit from the following:
Performance course in Music, Dance, or Theatre; Fine Arts
Survey; Art I, II, III, and IV; Talented Art I, II, III, and IV; Talented Music I, II, III and IV; Talented Theater Arts I, II, III, and IV; Speech III and Speech IV (one unit combined); AP Art History; AP Studio Art: 2-D Design; AP Studio Art: 3-D Design; AP Studio Art: Drawing; AP Music Theory; IB Film Study I; IB Film Study II; IB Music I; IB Music II; IB Art Design III; IB Theatre I

TOTAL = 19 Units

FOR STUDENTS GRADUATING 2014 -- 2017

ENGLISH
English I, II, III, and IV (no substitutions)

MATHEMATICS
Algebra I or Algebra I Part I and II, Algebra II, and one of the following: Geometry, Calculus or Comparable Advanced Math.

SCIENCE
Biology I or II, Chemistry and two of the following: Earth Science, Environmental Science, Physical Science, Biology II, Chemistry II, Physics, Physics II, or Physics for Technology. (Agriculture I and Agriculture II, (2 units) may be substituted for the one unit required from among these science courses.)

SOCIAL STUDIES
American History, Civics and Free Enterprise (combined for 1 unit) or Civics (1 unit) and two of the following: World History, Western Civilization, or World Geography.

FINE ARTS
Fine Arts Survey or substitute 1 unit of performance courses in Music, Dance, Drama, or Theatre; or 1 unit of Studio Art or Visual Art.

FOREIGN LANGUAGE
2 units in a single language and separate level courses.

STUDENTS MUST HAVE A 3.5 OVERALL GRADE POINT AVERAGE TO QUALIFY FOR THE REGENTS DIPLOMA. STUDENTS MUST HAVE A 2.5 GRADE POINT AVERAGE IN THE 17.5 CORE CURRICULUM TO QUALIFY FOR TOPS AND STATE AVERAGE ACT SCORE.

GRADE CLASSIFICATIONS
Freshmen 9th Grade Earned 0-4.5 Credits
Sophomore 10th Grade Earned 5-10.5 Credits
Juniors 11th Grade Earned 11 or more units of Credits
Seniors 12th Grade Scheduled enough units during the regular school year to complete all graduation requirements by May.

SCHEDULING: SELECTION AND CHANGES
During the spring semester, students select their courses for the upcoming school year with the help of their individual counselors. This schedule of classes is sent home for parent approval and signature and returned to the school. During the late spring, students are scheduled into classes.

Selection of teachers is not permitted at any time. Classes may be changed by the principal or designee in order to balance or to change a student who has previously passed a course or to meet graduation or college entrance requirements.

MA GRADING SCALE
A-4 pts. 93-100%
B-3 pts. 85-92%
C-2 pts. 75-84%
D-1 pt. 67-74%
F-0 pts. 0-66%

ADVANCED PLACEMENT COURSES
AP Courses are rigorous courses to give high school students the opportunity to experience college course material with the potential to earn college credit while still in high school. Students should be college bound with a good work ethic. Students are expected to take the AP Exam at the end of the course. Fees are subject to those placed on by College Board, the AP Exam provider. Honors requirements and teacher recommendations are required.

For more information about AP: testing samples, scoring of exams, fees, and reduced fee opportunities please refer to: http://www.collegeboard.org/

DUAL ENROLLMENT COURSES
Dual enrollment programs are available at BRCC, and Southern University.

Students enrolled in any Dual Enrollment Program will receive college credit and high school honors credit for the course(s) taken.

HONORS COURSES
Courses listed as honors will be graded on the MA Grading Scale listed above. Honors courses will be identified on transcripts with an honors behind the course title.

ENGLISH I

ENGLISH I HONORS
Grade: 9 Prerequisites: Honors requirements

This course will review basic grammar and note taking skills from previous grades and provide opportunities for oral and written communication. The basic types of paragraphs will be taught, along with methods of development. These will be combined into short themes. The literature will focus on selected world literature, with emphasis on the theme of coming of age as depicted in short stories, the novel, media, poetry, and Shakespeare.

ENGLISH I REMEDIATION
Grade: 9

This course is a remediation course focusing on Reading and Responding to Literature, Written Composition, Responding to Literature, Written Composition, Using Information Resources, and Proofreading. It is designed to assist the student in successful attainment of prerequisite skills for English I.

ENGLISH II

ENGLISH II HONORS
Grade: 10 Prerequisites: Honors requirements

This course will emphasize refinement of those grammar skills essential to advanced writing. Increased practice will be provided in writing short themes using standard methods development. Library skills leading to a research paper will be taught. The literature will focus on selected world literature, with emphasis on the study of culture as depicted in the novel, poetry, drama, short stories, and media. Coursework is rigorous and relevant in preparation for End of Course (EOC) testing.

ENGLISH II HONORS
Grade: 10 Prerequisites: Honors requirements

In addition to the material covered in regular English II, this course will include at least one Shakespearean play and 3-5 independently-read novels. The research and documentation process will be covered, culminating in a persuasive paper. This course is designed to move more rapidly and to cover the material in more depth than the regular English II course. Coursework is rigorous and relevant in preparation for End of Course (EOC) testing.

ENGLISH III

ENGLISH III - HONORS
Grade: 11

This course covers the same material as English III with supplemental readings and assignments. In addition to the required summer reading assignment, the student must have the approval and signature of the Honors class teacher at MA and a parent. Outstanding writing skills, an excellent reading repertoire, superior study habits, and exemplary behavior are necessary for success in this course. Any student registering during
the summer months must fulfill the summer reading assignment and get approval from the Honors teacher and parent.

ENGLISH IV  100400
Grade: 12

The literature will be a survey of British selections from the 18th to the 20th century. This course is designed to take the student to the 20th century. Emphasis will be placed on the content, language, and philosophy which has influenced the literature. The course will emphasize analytical and persuasive research and the paper writing skills are reinforced. Outside reading is required.

AP ENGLISH LITERATURE AND COMPOSITION  101400
Grade: 12
Prerequisites: Students must have a recommendation and a grade of A or B from the English III teacher.

This course is designed to be an honors British and world literature class combined with a strong preparation for the Literature and Composition AP exam. This course includes an in-depth survey of major British and world writers, a comprehensive literary research paper, and extensive writing in the four modes of discourse, as well as reading and writing assignments specifically designed to prepare students for the AP test and college admissions.

AFRICAN-AMERICAN LITERATURE  110000
Grades: 11-12

The literature segment will present a survey of African American Literature from its origins to present day. While emphasis will be placed on major authors, selections will include early African poetry and Apartheid prose.

ENGLISH 101 – DUAL ENROLLMENT  100500

Instruction and practice in the basic principles of expository writing: the paragraph and the whole composition—the methods of development, the thesis, the outline and organization, the structure and style. Instruction in functional grammar, sentence structure, diction and spelling, punctuation and mechanics, in direct relation to the student’s writing.

ENGLISH 102 – DUAL ENROLLMENT  100550

Students will read and write about literature and other essays. They will practice writing expository papers including the argument, the critical essay, the research paper, and the essay examination. They will learn techniques such as the use of primary and secondary sources, basic documentation skills, recognition of various documentation formats including MLA and APA, the ability to use research in writing, and knowledge of library, field, and electronic research procedures. Students will develop an ability to write for various audiences and purposes (including timed, in-class writing). Students will develop productive planning and revising processes for various kinds of papers, including those requiring research. Finally, students will review punctuation, mechanics, grammar, and sentence structure within the context of their writing.

ACT PREP ELA  107000
Grade: 11/12

This is a semester course which offers assistance to students in preparing for the English portions of the ACT.

PUBLICATIONS I (YEARBOOK)  151700
Grades: 11
Prerequisite: English teacher recommendation and student application.

This course focuses on the skills of magazine journalism. Class members will serve as the staff of The Edifice and will provide comprehensive coverage of personalities and events of MA for the year. Layout, photography, design, copywriting, and proofreading are some of the activities. Juniors accepted are expected to enroll in Publications II the following year to serve as editors. Ad sales are a grade requirement.

MATHEMATICS

NOTE: ALL STUDENTS ARE REQUIRED TO TAKE A MATHEMATICS COURSE EACH YEAR OF HIGH SCHOOL. MOST MATHEMATICS COURSES USE GRAPHING CALCULATORS TO REINFORCE CONCEPTS.

ALGEBRA I  302000
Grade: 9

This is an entry level course that bridges the gap between the concrete ideas of mathematics and the abstract thinking of algebra. Students will explore data, patterns formed by data, and the mathematical relations and functions that data represent. Topics studied include variables; operations and properties of real numbers; equivalent expressions and equations; solving and graphing linear equations and inequalities; factoring and solving quadratic equations; radicals; exponential growth; and probability. Special emphasis is placed on developing an understanding of functions through real-world application. Coursework is rigorous and relevant in preparation for End of Course (EOC) testing.

HONORS ALGEBRA I  302100
Prerequisite: Honors requirements, MA placement test scores, and recommendation of the MA Math Department.

This course is designed for the highly motivated math student and consists of a more detailed study of the topics covered in Algebra I regular. The pace and some independent study projects also distinguish this course from the basic algebra course. Calculator use is based on teacher recommendation. Coursework is rigorous and relevant in preparation for End of Course (EOC) testing.

MATH REMEDICATION  301700
Grade: 9

This course is a remediation course focusing on Mathematics skills. Students receive yearlong intense remediation in basic math skills and computerized instruction to prepare them for successful completion of high school mathematics.

GEOMETRY  310000
Grades: 9-10
Prerequisite: Successful completion of Algebra I

This course focuses on the study of visual patterns and the use of geometry to describe the physical universe, and the representation of mathematical concepts, and to teach problem solving skills. Students utilize inductive reasoning to discover patterns and make conjectures; and employ deductive reasoning to confirm conjectures through proofs. Topics include measurement formulas; geometric and spatial visualization; drawing skills; properties of congruence, similarity, parallelism, and perpendicularity; different methods of proof; properties of plane and solid figures; and transformations. Geometry provides unifying concepts that are used throughout high school mathematics. TI-89 calculators are NOT allowed.

HONORS GEOMETRY  310100
Prerequisites: Successful completion of Algebra I and honors requirements

This is a discovery course designed for students who are not challenged in the traditional style math class, who have a strong Algebra background, and who are self-motivated. Students, working in groups, will use investigative activities to discover geometrical concepts. Inductive reasoning skills, deductive reasoning skills, and problem-solving skills are stressed. All topics listed in the above Geometry course are studied in more depth with additional enrichment units and more individual and group projects. TI-89 calculators are NOT allowed.

ALGEBRA II  312000
Grade: 10-11
Prerequisites: Successful completion of Algebra I and Geometry

This course focuses on sharpening the understanding of concepts introduced in Algebra I and Geometry and extending the use of functions as models for real-world situations. Students explore algebraic expressions and forms, especially linear and quadratic forms, powers and roots, absolute value, and functions and graphs based on these concepts. Topics include logarithmic, exponential, and polynomial functions, and matrices. Algebraic and geometric topics are connected to topics in statistics, probability, science and engineering, and discrete mathematics.

HONORS ALGEBRA II  312100
Grades: 10-11
Prerequisites: Successful completion of Algebra I and honors requirements

This course, designed for the highly motivated math student, consists of a more detailed study of the topics in Algebra II with additional topics such as conics, sequences and series, probability and statistics and trigonometry. The honors course is faster paced and requires independent study.

ALGEBRA III  312700
Grade: 12

This course will explore the real-number system; arithmetic operations with polynomials, special products and factoring; linear, fractional and quadratic equations; inequalities, exponents, radicals and absolute values; functions and graphs; and complex numbers, logarithms, logarithmic and exponential functions.

ADVANCED MATH  332000
Grade: 11-12
Prerequisite: Successful completion of Algebra II

This is a college preparatory course that focuses on triangular and circular trigonometry and pre-calculus. It further explores functions and their graphs through mathematical modeling, simulations, and real-world applications. Additional topics include: analytic geometry, conics, logarithms, the Number e, combinatorics and probability, derivatives, and the use of graphing calculators.

HONORS ADVANCED MATH  332200
Grades: 11-12
Prerequisite: Successful completion of Geometry Honors and Algebra II Honors, and honors requirements

This is a college preparatory course designed for the highly motivated math student. It consists of a more detailed and enriched study of the topics in Algebra with the additional topics of systems, matrices, sequences, statistics, and an introduction to calculus – limits, tangent line problem, and the area under a curve problem. The honors course is faster paced and requires independent study. TI-83 or TI-84 calculator is required. TI-89 calculators are NOT allowed.

ACT PREP MATH  301400
Grade: 11/12

This is a semester course which offers assistance to students in preparing for the Math portions of the ACT.

SCIENCE

ENVIRONMENTAL SCIENCE  457000
Grades: 9

This course is designed to explore the mechanisms governing the structure and function of ecological systems and the relationship of such systems and the relationship of such systems to man. Topics for study include aquatic habitats, resource use, risk management, waste treatment and health issues.
This course prepares for a college major in the physical sciences or engineering. It is designed to be the equivalent of the general chemistry course usually taken during the first college year. Laboratory experiments in this class will be weekly and more in depth than general chemistry.

**ENVIRONMENTAL SCIENCE**
Grade: 12
Prerequisites: Biology I and Chemistry I

This course is designed to explore the mechanisms governing the structure and function of ecological systems and the relationship of such systems to man. Topics for study include aquatic habitats, resource use, risk management, waste treatment and health issues. Emphasis is on library research and field work, when possible.

**PHYSICS**
Grades: 11-12
Prerequisites: Successful completion of Advanced Math I or concurrent enrollment, and teacher recommendation.

This course includes an introduction to mechanics (kinematics, dynamics, and conservation laws), fluids, heat, wave phenomena, optics, electricity and magnetism. Mathematical problem solving techniques and laboratory investigations are emphasized.

**PHYSICS (DUAL)**
Grades: 11-12
Prerequisites: Successful completion of Advanced Math I or concurrent enrollment, and teacher recommendation.

This course is designed primarily for highly motivated science students. It covers the same concepts as in Physics. Advanced laboratory experiments are included and individual research and student will be emphasized.

**SOCIAL STUDIES**

**WORLD GEOGRAPHY**
Grade: 9

World Geography offers a study of the Earth’s natural environment such as its continents and oceans, rivers and lakes, mountains and plains, soils and weather. Also, world geography offers a study about the Earth’s human environment such as its population and resources, nations and cities, migration and transportation, and ways of making a living. This course will develop an understanding of the total environment of the world, both physical and cultural geography, and the impact of human environment interaction on our planet.

**HONORS WORLD GEOGRAPHY**
Grade: 9

This course covers the same material as World Geography but involves a more in-depth study, at a more intense pace. It also requires additional projects and presentations.

**HONORS ENVIRONMENTAL SCIENCE**
Grade: 9

This course is designed primarily for highly motivated science students. It covers the same concepts as in Environmental Science. Advanced laboratory experiments are included and individual research and student will be emphasized.

**BIOLOGY I**
Grade: 10

This is a survey course of the fundamental principles of biology, including the study of life, cell structure, biochemistry, taxonomy, genetics, and patterns of change, bacteria, fungi, plants, protists, animals, adaptations, human anatomy, and ecology. Coursework is rigorous and relevant in preparation for End of Course (EOC) testing.

**HONORS BIOLOGY**
Grade: 10
Prerequisites: Teacher recommendation

This course is designed for highly motivated science students. It covers the same concepts as in Biology I. Emphasis is on more difficult laboratory exercises, a science fair project, readings, individual research, and independent study. Coursework is rigorous and relevant in preparation for End of Course (EOC) testing.

**BIOLOGY II**
Grades: 12
Prerequisites: Successful completion of Biology I and Chemistry

This course is designed for students interested in biological careers and more in-depth study in biology. Major topics covered include scientific methods, genetics, evolution, physiology, marine biology and animal behavior and involve applications such as forensics, the design of zoological exhibits, and health careers.

**CHEMISTRY I**
Grades: 10-12
Prerequisites: Currently enrolled in Algebra II or successful completion of Algebra II.

Students acquire an understanding of the fundamental principles of modern chemistry through classroom and laboratory work. Topics such as matter and its composition, the mole concept, atomic theory, bonding, chemical formulas and equations, and acids, bases and salts, are treated with varying degrees of mathematical involvement.

**HONORS CHEMISTRY**
Grade: 10-12
Prerequisites: Completion of Algebra I, Physical Science, Biology I, teacher recommendation and enrolled in Algebra II or successful completion of Algebra II.

This course is designed primarily for highly motivated science students. It covers the same concepts as in regular chemistry but with more emphasis on the theoretical and mathematical aspects. Advanced laboratory experiments are included and individual research and student will be emphasized.

**PHYSICAL SCIENCE**
Grade: 12

This is an introductory science course, emphasizing the scientific method, introducing the students to various topics in chemistry and physics.

**AP CHEMISTRY II**
Grade: 12

This course is designed primarily for highly motivated science students. It covers the same concepts as in regular chemistry but with more emphasis on the theoretical and mathematical aspects. Advanced laboratory experiments are included and individual research and student will be emphasized.

**CIVICS**
Grade: 10
Prerequisites: An A or B in World Geography and a teacher recommendation.

Civics is the study of the practical, everyday aspects of our governmental structure and functions at all levels, local, state, and national, including the impact on government of current developments at home and abroad. Major emphasis is on the role of the citizen in our American democracy, to include duties and responsibilities as well as rights. Coursework also explores our place in an international community during this era of globalization. Studies of our Free Enterprise economic system are incorporated into the course.

**HONORS CIVICS**
Grade: 10

This course is designed to introduce students to civil and criminal law. Heavy concentration is placed on studying the Constitution. During the second semester students concentrate on civil laws. Students participate in mock trial presentations and develop knowledge and understanding in the nature and institutions of domestic law.

**AFRICAN-AMERICAN STUDIES**
Grade: 10-12

This course is structured to trace African American history from the African ways of life through the transformation of arriving in America and on to the present. This course is fast paced and very in depth. Supplemental reading and projects are required.

**SPANISH I**
Grade: 12

A beginning course designed to give students the experience of learning a second language and gaining an appreciation of the cultures and places in which Spanish is spoken. Listening comprehension, speaking, reading, and writing are included in the course curriculum.
This course continues the study of Spanish I with greater emphasis on idioms, vocabulary, and several tenses. Students begin to attempt sustained conversation and the reading of narratives.

**ELECTIVE COURSES**

**BUSINESS**

**INTRO TO BUS. COMP. APPLICATIONS** 641900

This course is designed to provide students with basic computer application skills. Students will be introduced, for a minimum of six weeks of the school year, to the touch method of operating a computer keyboard to produce simple business documents. Emphasis is placed on basic computer concepts both hardware and software, word processing and spreadsheet applications.

**ROBOTICS**

**ENGINEERING/ROBOTICS**

**INTRO TO ENGINEERING DESIGN (IED)** 724610

This course introduces students to the engineering design process. They develop their engineering portfolio that will follow them through all the courses. Working in teams they learn how to use sketching as a means to communicate their ideas as well as the geometry that is used in parametric modeling, assembly, and motion constraints. They explore the production and marketing of products.

**PRINCIPLES OF ENGINEERING (POE)** 724620

This course covers the different types of engineering, the communication and documentation that are used by engineers. Mechanics, thermodynamics, fluid systems, electrical systems and control systems are also covered. Using the appropriate formulas students make static and strength calculations for various materials before testing them. They explore the fields of reliability engineering and kinematics.

**ENGINEERING DESIGN & DEVELOPMENT (EDD)** 724670

This course is the capstone research and development course. Students working as individuals or on teams draw from all their previous experiences in the other engineering courses. They select a problem, design a solution, conduct patent research, build a prototype, conduct testing of the prototype, evaluate the test results, and present their conclusions to an engineering panel. The project is a yearlong course that involves guided independent research by the teacher and engineering/industry mentors.

**ROBOTICS** 723050

Grades: 10-12

This course is designed for students to develop skills in mechanical design and construction as they work in teams to build simple and complex robotic devices. Students will explore usage of robotics in modern industry and examine how robotics devices are affecting our lives.

**COMPETITION ROBOTICS** 723070

Grades: 11-12

This course is designed for students to walk through the design and build a mobile robot to play a sport-like game. During this process they will learn key STEM principles and robotics concepts. At the culmination of this class, they will compete head-to-head against their peers in the classroom, or on the world stage in the VEX Robotics Competition.

**HOSPITALITY AND TOURISM** 748950

This course is designed to provide students with a thorough understanding of the issues and challenges of planning for sustainable tourism at the local and regional levels. The course examines the basic aspects of planning and developing tourism infrastructure, products, attractions and services. It exposes students to planning principles and procedures. Extensive use is made of case studies.

**LEADERSHIP** 748960

This course is designed to provide students with the principles of relational leadership and learn to develop interpersonal and group leadership skills to impact their lives and their communities. Content areas include decision-making, goal setting, effective communication, servant leadership, organization and time management skills, and concrete strategies to implement change.

**SPEECH AND THEATRE**

**PUBLIC SPEAKING** 185000

Grades: 9-12

This is a basic course designed to train students for specialized speaking situations including reports, orations, impromptu speaking, panel discussions and elementary debate. Students learn techniques for overcoming stage fright and improve their ability to compose and deliver speeches as well as listen critically to other students’ speeches.

**THEATRE I: INTRODUCTION TO THEATRE** 833100

Grades: 9-10

Prerequisite: None

Students explore basic techniques in acting, directing, and producing live theatre as well as critical analysis of the production. Assignments provide an opportunity for the individual to develop, organize, and interpret knowledge for audiences. Students develop creative expression through the application of knowledge, ideas, communication and collaboration skills, organizational abilities, and imagination in preparation for further learning.

**THEATRE II: METHODS & STYLES OF ACTING** 833200

Grades: 10-12

Prerequisite: Intro to Drama

Students apply basic techniques in acting, directing, and producing live theatre while exploring major developments in drama, major playwrights and their plays, the evolution of theatre as a culture, production styles, and critical analysis of the art. Students develop aesthetic perception as well as historical and cultural perspective through the knowledge of art forms, respect for their commonalities and differences, and by recognizing and understanding that the arts throughout history are a record of human experience with a past, present, and future. The skills of analysis, problem solving, cooperative involvement, flexibility, productivity, and self-direction contribute to preparing the individual for further learning.

**PLAY PRODUCTION** 833400-1

Grades: 10-12

Prerequisite: Intro to Drama

Students apply acquired knowledge and skills in acting, characterization, script analysis, and focused research as they prepare a play for performance. Additional skills are developed in play selection, publicity and promotion, stage management, and house management as well as scenery, costume, props, and sound design/construction. Students will also investigate career opportunities in theatre arts. Students develop flexibility, productivity, leadership collaboration skills. Students also develop verbal and written skills in critical analysis through the study of and exposure to the arts. Students are required to participate in a one-act or full-length play each semester. After school and/or evening rehearsals will be required in preparation for performances.

**HEALTH/PHYSICAL EDUCATION**

**HEALTH (½ CREDIT)** 935000

Grade: 10

Health Education is a course that will help students to make informed choices about personal, family, and community health. The topics to be covered are first aid and safety, personal health, substance use and abuse, nutrition, and how to prevent obesity. In order to fulfill the state’s health requirement (Bulletin No. 159), each student must research the topics listed above; write essays, complete worksheets, collect newspaper and magazine articles, pass written exams and attend special lectures provided during school hours.

******************************************************************************

**PE I** 931200

Grade: 9

Fee: PE Uniform

The aim of this course is to develop activities which a person can use later in life. Such activities as volleyball, basketball, track and field, soccer, flag football, and softball are taught.

**PE II** 931300

Grade: 10

Fee: PE Uniform

The aim of physical education is to develop activities which a person can use later in life. Such activities as volleyball, basketball, track and field, soccer, flag football, and softball are taught.

**PE III** 931400

Grade: 11

Fee: PE Uniform

The aim of this course is to develop activities which a person can use later in life. Such activities as volleyball, basketball, track and field, soccer, flag football, and softball are taught.

**ROTC I - INTRO TO THE ROTC I** 941000

Grades - 9-12

Presents the history, purpose, and objectives of the ROTC program. Introduction to leadership theory, drill, ceremonies, and first aid. Basic marksmanship with a .177 cal precision air rifle which includes firing position, range practice, and record firing.

**VISUAL AND PERFORMING ARTS**

**ART I** 811000

Grade: 9-12

This course covers the following topics: Studio Production, critical analysis, aesthetic awareness, basic art history. Students are encouraged to develop their own ideas while learning the elements and principles of visual design. Students are also taught the foundations.
in drawing, painting, sculpture, graphics, ceramics, and printmaking. The curriculum of this course focuses on integrating art into the content areas: English, science, math, and social studies. This course is a prerequisite for all other Studio courses.

**ART II**  
**812000**  
Grades: 10-12  
Prerequisite: Art I

This course places emphasis on developing concepts in art making and problem solving. Students will also continue developing skills in drawing, painting and three-dimensional design covered in Art I, with critical and aesthetic analysis of contemporary artists. Transfer students must submit a portfolio.

**ART III**  
**813000**  
Grades: 11-12  
Prerequisite: Art I and II

This is an intermediate level of visual arts which concentrates on a variety of painting media as well as mixed media and 3-D forms and graphic arts. In this course also examines the history of painting, critical and aesthetic concepts. Transfer students must submit a portfolio.

**FINE ARTS SURVEY**  
**889000**  
Grade: 10-12

This course is for seniors only who have not fulfilled the Fine Arts Survey requirement for TOPS. This is a course designed to give "non-art" students an introduction to the arts of the western civilization. This course is a look at the historical progress of art from prehistoric to modern day. Some hands-on projects are included. If you have your art credit, you are not allowed to take this course.

**MUSIC**

**MEDIA ARTS I**  
**815610**

In this course students explore and refine the use of music in various media platforms including film, television, and visual arts to develop creativity, innovation, media literacy, information, communication, and technology literacy. This course analyzes current uses of music in developing media industries.

**MEDIA ARTS II**  
**815620**

In this course students explore and refine the use of music in various media platforms at an intermediate level, including film, television, and visual arts to develop creativity, innovation, media literacy, information, communication, and technology literacy. This course analyzes current uses of music in developing media industries.

**MEDIA ARTS III**  
**815630**

In this course students explore and refine the use of music in various media platforms at an advanced level including film, television, and visual arts to develop creativity, innovation, media literacy, information, communication, and technology literacy. This course analyzes current uses of music in developing media industries.

**MUSIC APPRECIATION**  
**828300**

Grades: 9 – 12

This course is for students with a deep interest in music. The course will explore fundamentals in rhythm, harmony, melody, composition and notation. Knowledge of computers and electronics as well as an understanding of the fundamentals of music are essential.

**TV AND FILM**

**INTRO TO FILM PROD.**  
**190300**

This course introduces the fundamental elements of film artistry and production. Topics include film styles, history, and production techniques as well as the social values reflected in film art. Upon completion, students should be able to analyze critically the elements covered in relation to selected films.

**INTERMEDIATE FILM PRODUCTION**  
**191300**

This course introduces the fundamental elements of intermediate film artistry and production. Topics include film styles, history, and production techniques as well as the social values reflected in film art. Upon completion, students should be able to analyze critically the elements covered in relation to selected films.

**ADVANCED FILM PRODUCTION**  
**191400**

This course introduces the fundamental elements of intermediate film artistry and production. Topics include film styles, history, and production techniques as well as the social values reflected in film art. Upon completion, students should be able to analyze critically the elements covered in relation to selected films.

**CREDIT RECOVERY**

**EDGENUITY**  
**003800**

This course allows students to recovery a class or classes that have not been successfully completed. This is a course that is strictly completed on-line.
# COURSE SELECTION SHEET

<table>
<thead>
<tr>
<th>ENGLISH</th>
<th>SCIENCE</th>
<th>SPEECH &amp; THEATRE</th>
<th>MUSIC</th>
<th>TV and FILM</th>
<th>ENGINEERING</th>
<th>CREDIT RECOVERY</th>
</tr>
</thead>
<tbody>
<tr>
<td>105000 English Remediation</td>
<td>457000 Environmental Science</td>
<td>185000 Public Speaking</td>
<td>815610 Media Art I</td>
<td>190300 Intro to Film Production</td>
<td>724610 Intro to Engineering Design</td>
<td>003800 Edgenuity</td>
</tr>
<tr>
<td>100100 English I</td>
<td>457110 Environmental Science (H)</td>
<td>187000 (Intro to Drama)</td>
<td>815620 Media Art II</td>
<td>191300 Intermediate Film Production</td>
<td>724620 Principles of Engineering</td>
<td></td>
</tr>
<tr>
<td>102100 English I (H)</td>
<td>404000 Physical Science</td>
<td>188000 (Methods and Styles)</td>
<td>815630 Media Art III</td>
<td>191400 Advanced Film Production</td>
<td>724670 Engineering Design &amp; Development</td>
<td></td>
</tr>
<tr>
<td>100200 English II</td>
<td>404100 Physical Science (H)</td>
<td>190000 (Play Productions)</td>
<td>828100 Music Appreciation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>102200 English II (H)</td>
<td>411000 Biology I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100300 English III</td>
<td>411400 Biology I (H)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>102300 English III (H)</td>
<td>413000 Biology II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100400 English IV</td>
<td>421000 Chemistry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>101400 English IV—Lit &amp; Comp (AP)</td>
<td>421100 Chemistry (H)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>107000 ACT Prep-ELA</td>
<td>421200 Chemistry II (AP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>110000 African American Lit</td>
<td>404000 Physical Science (12th Grade Only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>301700 Math Remediation</td>
<td>431000 Physics Physics (DUAL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>302000 Algebra I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>302100 Algebra I (H)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>301000 Geometry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>301100 Geometry (H)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>311000 Geometry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>312000 Algebra II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>312100 Algebra II (H)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>332000 Advanced Math</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>332200 Advanced Math (H)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>312700 Algebra III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>301400 ACT Prep-Math</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEALTH, PHYSICAL ED. &amp; ROTC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>935000 Health only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>931200 PE I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>931300 PE II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>931400 PE III (Elective Credit ONLY)</td>
<td>211700 Civics Full Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>931500 PE IV (Elective Credit ONLY)</td>
<td>211730 Civics (H) Full Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>941000 ROTC I - Intro to ROTC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>811000 Art I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>812000 Art II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>813000 Art III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>889000 Fine Arts Survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOREIGN LANGUAGES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>561000 Spanish I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>562000 Spanish II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUSINESS EDUCATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>641900 Intro. to Bus. Comp. Applications</td>
<td>253500 Law Studies I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>643300 CTE Internship I</td>
<td>253600 Law Studies II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>151700 Publication I (Yearbook)</td>
<td>226100 African-American Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAREER ELECTIVES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>748950 Hospitality and Tourism</td>
<td>222000 World History</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>748960 Leadership</td>
<td>222100 US History</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>614100 Basic Careers</td>
<td>221300 US History (H)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>723050 Robotics</td>
<td>221200 US History (AP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>723070 Competition Robotics</td>
<td>223000 World History (AP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H ( Honors)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP (Advanced Placement)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DUAL (Dual Enrollment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## MENTORSHIP ACADEMY
### 2016-2017 School Calendar

<table>
<thead>
<tr>
<th>July 2016</th>
<th>August 2016</th>
<th>September 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Su M Tu W Th F S</td>
<td>Su M Tu W Th F S</td>
<td>Su M Tu W Th F S</td>
</tr>
<tr>
<td>1 2</td>
<td>1 2 3 4 5 6</td>
<td>4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>3 4 5 6 7 8 9</td>
<td>7 8 9 10 11 12 13</td>
<td>11 12 13 14 15 16 17</td>
</tr>
<tr>
<td>10 11 12 13 14 15 16</td>
<td>14 15 16 17 18 19 20</td>
<td>18 19 20 21 22 23 24</td>
</tr>
<tr>
<td>17 18 19 20 21 22 23</td>
<td>21 22 23 24 25 26 27</td>
<td>25 26 27 28 29 30</td>
</tr>
<tr>
<td>24 25 26 27 28 29</td>
<td>28 29 30</td>
<td>31</td>
</tr>
<tr>
<td><strong>July 4th Holiday</strong></td>
<td><strong>Teachers First Day 1st</strong></td>
<td><strong>Labor Day Holiday-5th</strong></td>
</tr>
<tr>
<td><strong>9th Grade Jump Start</strong></td>
<td><strong>Teachers In Service Day 1st-5th</strong></td>
<td><strong>Club Day-7th</strong></td>
</tr>
<tr>
<td><strong>July 18th – 20th</strong></td>
<td><strong>Students First Day 8th</strong></td>
<td><strong>ACT-10th</strong></td>
</tr>
<tr>
<td><strong>Discovery Day Orientation</strong></td>
<td><strong>Shark Camp 8th – 12th</strong></td>
<td><strong>End of 1st Six Weeks-20th</strong></td>
</tr>
<tr>
<td><strong>10th Grade-July26th</strong></td>
<td></td>
<td><strong>Early Dismissal-21st</strong></td>
</tr>
<tr>
<td><strong>11th Grade-July27th</strong></td>
<td></td>
<td><strong>Parent Teacher Conference</strong></td>
</tr>
<tr>
<td><strong>12th Grade-July28th</strong></td>
<td></td>
<td><strong>Shark Speakers-TBA</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>October 2016</th>
<th>November 2016</th>
<th>December 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Su M Tu W Th F S</td>
<td>Su M Tu W Th F S</td>
<td>Su M Tu W Th F S</td>
</tr>
<tr>
<td>1</td>
<td>1 2 3 4 5</td>
<td>1 2 3</td>
</tr>
<tr>
<td>2 3 4 5 6 7 8</td>
<td>6 7 8 9 10 11 12</td>
<td>4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>9 10 11 12 13 14 15</td>
<td>13 14 15 16 17 18 19</td>
<td>11 12 13 14 15 16 17</td>
</tr>
<tr>
<td>16 17 18 19 20 21 22</td>
<td>20 21 22 23 24 25 26</td>
<td>18 19 20 21 22 23 24</td>
</tr>
<tr>
<td>23 24 25 26 27 28 29</td>
<td>27 28 29 30</td>
<td>25 26 27 28 29 30 31</td>
</tr>
<tr>
<td>30 31</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SAT-1st</strong></td>
<td><strong>Club Day-2nd</strong></td>
<td><strong>SAT-3rd</strong></td>
</tr>
<tr>
<td><strong>Club Day-5th</strong></td>
<td><strong>End of 2nd Six Weeks-4th</strong></td>
<td><strong>Club-7th</strong></td>
</tr>
<tr>
<td><strong>Prof. Development-7th</strong></td>
<td><strong>SAT-5th</strong></td>
<td><strong>ACT-10th</strong></td>
</tr>
<tr>
<td>(Students Do Not Attend)</td>
<td><strong>Presidential Election-8th</strong></td>
<td><strong>Early Dismissal-15th-20th</strong></td>
</tr>
<tr>
<td><strong>Fall Break-10th</strong></td>
<td><strong>(No School)</strong></td>
<td><strong>End of 3rd Six Weeks-20th</strong></td>
</tr>
<tr>
<td><strong>Club Day-19th</strong></td>
<td><strong>Thanksgiving Holiday-21st-25th</strong></td>
<td><strong>End of Semester</strong></td>
</tr>
<tr>
<td><strong>ACT-22nd</strong></td>
<td><strong>Shark Speakers-TBA</strong></td>
<td><strong>Contingency Day-21st</strong></td>
</tr>
<tr>
<td><strong>Shark Speakers-TBA</strong></td>
<td></td>
<td><strong>Winter Break-21st-30th</strong></td>
</tr>
<tr>
<td><strong>ASVAB-18th</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**January 2017**

- Winter Break - 2nd-3rd
- Teachers Return - 4th
- Students Return - 5th
- Early Dismissal - 13th
- Professional Development - MLK Holiday - 16th
- Club Day - 18th
- SAT - 28th
- Shark Speakers - TBA

**February 2017**

- Club Day 1st
- End of 4th Six Weeks - 15th
- Early Dismissal - 15th
- Parent/Teacher Conference - Mardi Gras Holiday - 1st
- Shark Speakers - TBA

**March 2017**

- Mardi Gras Holiday - 1st
- Early Dismissal - 10th
- Professional Development - Club Day - 15th
- Shark Speakers - TBA

**April 2017**

- End of 5th Six Weeks
- ACT - 8th
- Easter/Spring Break - 14th - 21st

**May 2017**

- SAT - 6th
- Last Day for Seniors - 8th
- Early Dismissal - 19th - 24th
- End of Semester - 24th
- Last Day for Students - 24th
- Contingency Day - 25th

**June 2017**

- SAT - 3rd
- ACT - 10th