

# Course Descriptions 2017-2018 Lemon Bay High School

Fine Arts

Foreign Language

Language Arts

Mathematics

Media

Physical Education /Health

Naval Junior Reserve Officer Training Corps

Science

Social Studies

Career & Technical

**NOTE: Some courses may be added or deleted due to enrollment and/or teacher availability.**

## **FINE ARTS**

### **ART**

0102300 **CERAMICS/POTTERY I** - GRADES 9-12 - 1 CREDIT

Roll up your sleeves and dig in! Learn the ancient art of hand building with clay. This class will introduce students to the many methods of hand building and decorating ceramics, the history and cultural significance of ceramics and ceramic vocabulary. Students will learn to make both sculptural and functional pieces.  
\$\$ Art Fee \$\$

0102310 **CERAMICS/POTTERY II** - GRADES 10-12 - 1 CREDIT

If being “One with the Clay” was for you, and you are ready to expand on techniques learned in Ceramics I, are self-motivated, want to learn to use the potter’s wheel and sample projects using glass and tile then you are ready for this class! The class will challenge students to create more complex and aesthetically pleasing projects, keep a sketchbook and complete two research projects.  
\$\$ Art Fee \$\$

0102320 **CERAMICS/POTTERY III HONORS**- GRADE 11-12 - 1 CREDIT

Survived Ceramics I and II? Advanced class is for students who are ready to focus on more complex projects and advance their skills and are self-motivated. Students will be expected to keep a sketchbook and complete two research projects.  
\$\$ Art Fee \$\$

0109320 **PORTFOLIO I- 3D Art** – GRADES 11-12 - 1 CREDIT

**Prerequisite: Approval from Instructor**

Students work in a self-directed environment to develop a portfolio showing a body of their own work that visually explores a particular artistic concern, articulated and supported by a written artist's statement. Artists may work in, but are not limited to, content in clay, wood, wire, glass, metal, jewelry, fabrics/fibers, fashion design, green design, industrial design, and/or objects for interior design or architecture that integrate 3-dimensional design issues in a purposeful way. Students regularly reflect on aesthetics and art issues individually and as a group, and manipulate the structural elements of art and organizational principles of design to create 3-dimensional works of art that are progressively more innovative and representative of the student's artistic and cognitive growth. In keeping with the rigor expected in an accelerated setting, students’ portfolios show personal vision and artistic growth over time, mastery of visual art skills and techniques, and evidence of sophisticated analytical and problem-solving skills based on their structural, historical, and cultural knowledge. Students are self-directed and display readiness for high levels of critical thinking, research, conceptual thinking, and creative risk-taking. This course incorporates hands-on activities and consumption of art materials.  
\$\$ Art fee \$\$

0109360 **ADVANCED PLACEMENT STUDIO ART- 3D PORFOLIO**- GRADE 11-12 - 1 CREDIT

This is a rigorous portfolio-based AP course designed for the most advanced and dedicated art students. Rigorous expectations and an intense schedule of project completion will drive the curriculum. The instructor will facilitate the creation of a deep portfolio of pieces that will be assessed by the College Board for possible college art credit.  
\$\$ Art Fee \$\$

## DRAMA

**These courses involve public performances during the year and require some after school commitments as well as reasonable lab fees.**

0400310      **THEATRE I** - GRADES 9-12 - 1 CREDIT

The purpose of the course is to enable students to develop and synthesize the fundamental elements of theatre arts into final production using varied techniques and processes. The content will include, but will not be limited to, background information on the history, traditions, literature, and operations aspects of the theater. Opportunities to develop skills in acting and an introduction to set construction, makeup, costume, lighting and sound will be provided.

0400320      **THEATRE II** - GRADES 10-12 - 1 CREDIT

**Prerequisites: Theater I**

Will meet graduation requirements for Performing Fine Arts. Will meet Florida Academic Scholars requirements for Art/Music.

“Enjoyed getting your feet wet onstage or behind the scenes in Theatre I? Jump in headfirst with this upper level theatre class! Compete for District slots, perform in a Mainstage production, and become a part of our theatrical family.”

The purpose of this course is to provide the career-oriented drama student an opportunity to describe through comparison and analysis the interaction of various theatre fundamentals. The content will include, but not be limited to, the areas of directing, vocal techniques, movement, theory, production, management, and scriptwriting.

0400330      **THEATRE III HONORS** - GRADES 11-12 - 1 CREDIT

**Prerequisite: Theater II**

“Leadership opportunities abound for the dedicated, the few, the proud! Actualize your potential in this busy class. Leadership training, IE Districts, Mainstage production, One Act Districts, and States...”

The purpose of this course is to provide the career-oriented drama student an opportunity for performance based production and interpretation. The content will include, but not be limited to, the areas of directing, vocal techniques, movement, historical and modern theory, production, management, and scriptwriting. Students will have the opportunity to direct, design and produce plays

0400340      **THEATRE IV HONORS** - GRADE 12 - 1 CREDIT

**Prerequisite: Theatre III Honors**

This course is designed for students with extensive experience in theatre, and promotes significant depth of engagement and lifelong appreciation for theatre through a broad spectrum of primarily self-directed study and performance. In keeping with the rigor expected in an accelerated setting, students assemble a portfolio that showcases a significant body of work representing personal vision and artistic growth over time; mastery of theatre skills and techniques in one or more areas; and evidence of sophisticated oral and written analytical and problem-solving skills based on their structural, historical, and cultural knowledge.

0400410      **TECH THEATRE I** - GRADE 9-12 - 1 CREDIT

Students focus on developing the basic tools and procedures for creating elements of technical theatre, including costumes, lighting, makeup, properties (props), publicity, scenery, and sound. Technical knowledge of safety procedures and demonstrated safe operation of theatre equipment, tools, and raw materials are central to success in this course. Students explore and learn to analyze dramatic scripts, seeking production solutions through historical, cultural, and geographic research. Students also learn the basics of standard conventions of design presentation and documentation; the organizational structure of theatre production and creative work in a collaborative environment; and the resulting artistic improvement. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend or participate in technical work, rehearsals, and/or performances beyond the school day to support, extend, and assess learning in the classroom.

0400420      **TECH THEATRE II** - GRADE 9-12 - 1 CREDIT

Students continue their work of creating elements of technical theatre, including costumes, lighting, makeup, properties (props), publicity, scenery, and sound. Students are expected to participate in less exploration and more directed task completion in preparation for productions. Students may be required to attend or participate

in technical work, rehearsals, and/or performances beyond the school day to support, extend, and assess learning in the classroom.

## MUSIC

- 1302300 **BAND I** - GRADES 9- 1 CREDIT.  
1302310 **BAND II** - GRADES 10- 1 CREDIT  
1302320 **BAND III** - GRADES 11- 1 CREDIT  
1302330 **BAND IV** - GRADES 12- 1 CREDIT  
**Prerequisite: Band director approval.**

In order to meet criteria for successful academic credit, all students are required to attend all scheduled after school rehearsals and performances. Some financial obligation may be included for participation in the class. Keep up your gift of music with band. This course is designed for students with previous wind and percussion background. Students will use the performance of band music to develop individual as well as ensemble performance techniques. This ensemble performs up to four concerts per year including performance at a district and possible state concert festival. Members of this class make up the Symphonic Band Ensemble.

- 1302500 **JAZZ ENSEMBLE I** - GRADE 9-12 - 1 CREDIT  
1302510 **JAZZ ENSEMBLE II** - GRADES 10-12 - 1 CREDIT  
**Prerequisite: Band director approval through audition.**

This jazz ensemble is for Freshman and Sophomore students or those who have never been in a jazz band before. In order to meet criteria for successful academic credit, students are required to attend all scheduled after school rehearsals and performances. A financial obligation may be included for participation in the class.

- 1302520 **JAZZ ENSEMBLE III** - GRADES 11-12 - 1 CREDIT  
1302530 **JAZZ ENSEMBLE IV** - GRADE 12 - 1 CREDIT  
**Prerequisite: Band director approval through audition.**

This jazz ensemble is for Junior and Senior students or those with significant jazz band experience. In order to meet criteria for successful academic credits students are required to attend all scheduled after school rehearsals and performances. A financial obligation may be included for participation in the class.

- 1305300 **EURHYTHMICS I (MARCHING BAND COLOR GUARD)** - GRADES 9- 1 CREDIT  
1305310 **EURHYTHMICS II** - GRADES 10- 1 CREDIT  
1305320 **EURHYTHMICS III** - GRADES 11- 1 CREDIT  
1305330 **EURHYTHMICS IV** - GRADES 12- 1 CREDIT  
**Prerequisite: Director approval through audition and pre-season camp attendance.**

**Like to throw and spin things.... then color guard is for you.**

This course is designed towards the development of the marching band visual ensemble. Students in this class must be members of the visual ensemble in the fall. The purpose of the class is to give students the opportunity to develop skills in flag, rifle, and saber techniques, as well as some basic dance and movement techniques. Students will also learn techniques on routine, flag, and production design. Many students in this course perform with the indoor guard during the spring. Participation in the marching band is required.

- 1301360 **KEYBOARDING I** - GRADES 10-12 - 1 CREDIT  
The purpose of this course is to enable students to develop basic keyboard skills, including interpretation of notation and performance in varied styles.

## FOREIGN LANGUAGE

- 0708340 **SPANISH I** - GRADES 9-12 - 1 CREDIT  
**Recommended: Incoming freshmen have a "B" average or better in English. Current high school students have at least a 2.0 GPA and a passing FSA score.**

It's a small world after all. Be part of it and learn another language. With Spanish you will be well on your way! The course includes beginning skills in listening and speaking with special attention to pronunciation. An introduction to reading and writing will also be included, as well as the fundamentals of grammar and culture.

- 0708350 **SPANISH II** - GRADES 9-12 - 1 CREDIT  
**Recommended: A minimum of a "C" average in Spanish I.**

Now that you are hooked, complete your college requirements and become more comfortable with everyday situations. The content includes an expansion of the listening and oral skills previously acquired. Reading and writing should receive more emphasis, while oral communication remains the primary objective. The course should include a cultural survey of Spanish-speaking people.

0708360

**SPANISH III** - GRADES 10-12 - 1 CREDIT

**Recommended: A minimum of a "C" average in Spanish II.**

Imagine yourself immersed in a cultural experience in Spain and several other countries. Enjoy a Sunday afternoon at the Corrida (Bullfights) followed by Tapas at a sidewalk café.

The content includes expansions of vocabulary and conversational skills through discussions based on selected readings. Analyzing reading selections should strengthen student's acquisition of grammatical concepts. Contemporary vocabulary should stress activities, which are important to everyday life of Spanish-speaking people.

0708370

**SPANISH IV** - GRADES 11-12 - 1 CREDIT

**Prerequisite: A minimum of a "C" average in Spanish III.**

Travel through the windmills of La Mancha with Don Quixote and Sancho Panza, run through the streets of Madrid with Lazarillo de Tormes and learn about all the gourmet delicacies of Spain and other Spanish speaking countries. The content includes more advanced language structures and idiomatic expressions, with emphasis on conversational skills. There should be additional growth in vocabulary for practical purposes including writing.

0708400

**AP SPANISH** - GRADES 11-12 - 1 CREDIT

**Prerequisite: AP Contract**

This course is primarily a comprehensive review of all previous knowledge pertaining to the Spanish language. This class builds upon the skills developed within introductory and intermediate Spanish classes by applying each skill to a specific, contemporary context (health, education, careers, literature, history, family, relationships, and environment being common themes). Thus, the students strive to refine their skills in writing, reading, speaking, and understanding spoken Spanish. Students concentrate on developing proficiency in such skills specifically in preparation for the AP Spanish Language examination. In addition, this course will emphasize mastery of linguistic competencies at a very high level of proficiency.

## **LANGUAGE ARTS**

1001310

**ENGLISH I** - GRADE 9 - 1 CREDIT

The content of this course includes the study of writing and communication, as well as literature and vocabulary building. Students practice expository and persuasive writing with an emphasis on correct paragraph and essay structure. Grammar skills are also reviewed and a variety of literary genres are covered: short story, poetry, drama and the novel. FSA preparation is ongoing in the classroom as well as in a lab setting with individualized program practice.

1001320

**ENGLISH HONORS I** - GRADE 9 - 1 CREDIT

The contents include instruction in the critical analysis of major literary genres. Composition instruction focuses on using the writing process in creative, logical, and critical modes, and includes frequent practice in all aspects of the writing process. Formal speaking experiences are provided, and the critical skills of listening and observing are taught. SAT/ACT practice in vocabulary and other skills areas is studied and research skills are introduced using MLA format.

1001325

**ENGLISH HONORS I-PRE-AP** - GRADE 9 - 1 CREDIT

**Prerequisite: B average in previous honors courses. AP Contract.**

The contents include instruction in the critical analysis of major literary genres. Composition instruction focuses on using the writing process in creative, logical, and critical modes, and includes frequent practice in all aspects of the writing process. Formal speaking experiences are provided, and the critical skills of listening and observing are taught. SAT/ACT practice in vocabulary and other skills areas is studied and research skills are introduced using MLA format. Additionally this course will introduce the AP test rubrics and prepare students for taking AP Literature and AP Language and Composition in their junior and senior years.

1001340

**ENGLISH II** - GRADE 10 - 1 CREDIT

The content includes the reading strategies and vocabulary necessary for comprehension of printed materials. The course should include composition instruction that focuses upon the writing of essays for various purposes

and audiences, using literary and nonliterary subjects. Literature study will emphasize analysis of selections found in world literature. The study of language will include grammar, mechanics, usage, and other conventions of standard written English. The study of mass media will include an analysis of propaganda and persuasion techniques.

1001350 **ENGLISH HONORS II** - GRADE 10 - 1 CREDIT  
**Prerequisite: B average in previous English courses.**

The content includes instruction in universal themes found in world literature, as well as the critical analysis of various genres in that literature. Composition instruction will emphasize the creative, logical, and critical aspects of the writing process. Frequent practice will be provided to utilize all aspects of composition, including prewriting, drafting, and revising. The study of language will include usage, mechanics, and other elements of standard written English. Formal and informal speaking opportunities will be provided. Vocabulary study will focus on preparation for standardized tests. Critical skills in listening and observing will be taught. The study of mass media will include an analysis of propaganda and persuasion techniques.

1001355 **ENGLISH HONORS II- PRE-AP** - GRADE 10 - 1 CREDIT  
**Prerequisite: B average in previous honors courses. AP Contract.**

The content includes instruction in universal themes found in world literature, as well as the critical analysis of various genres in that literature. Composition instruction will emphasize the creative, logical, and critical aspects of the writing process. Frequent practice will be provided to utilize all aspects of composition, including prewriting, drafting, and revising. The study of language will include usage, mechanics, and other elements of standard written English. Formal and informal speaking opportunities will be provided. Vocabulary study will focus on preparation for standardized tests. Critical skills in listening and observing will be taught. The study of mass media will include an analysis of propaganda and persuasion techniques. Additionally this course will introduce the AP test rubrics and prepare students for taking AP Literature and AP Language and Composition in their junior and senior years.

1001370 **ENGLISH III** - GRADE 11 - 1 CREDIT

The content includes frequent practice in writing multi-paragraph papers of various types, with particular attention given to the writing of documented papers. Relative to these writing assignments, reference and summarizing skills will also be stressed. Listening, speaking, and writing assignments will be related, when appropriate, to the study of American literature. Literature study will include the analysis of various examples of American literary works in various genres. Vocabulary study will focus on preparation for standardized tests.

1001380 **ENGLISH HONORS III** - GRADE 11 - 1 CREDIT  
**Prerequisite: Teacher recommendation and B average in previous honors courses.**

This course combines a survey of American literature with preparation for ENC1101 and ENC1102. Particular attention will be given to writing instruction tone and style in a variety of modes of discourse, literary analysis, and the researched paper. In addition, this course will focus on SAT and ACT preparation. Formal and informal oral communication activities will be provided.

1001430 **AP LITERATURE AND COMPOSITION** - GRADE 11 - 1 CREDIT  
**Prerequisite: B average in previous honors courses.**

Advanced Placement Literature and Composition is a college-level course for highly motivated students who desire an intensive study of literature. The focus will be on the interpretation, analysis, evaluation and appreciation of literature through a variety of modes of expression. All students in the course will be expected to take the AP English Literature and Composition exam in the Spring.

1001405 **ENGLISH IV: College/Career Prep** - GRADE 12 - 1 CREDIT

The content includes instruction in vocabulary and reading necessary for students' comprehension of printed materials. Literature study will include the critical analysis of representative examples from British literature, as they reflect changes in the language and the development of literary traditions in the English language. Writing experiences will be structured to provide practice in real-life writing situations likely to be encountered beyond secondary school. Students will be required to complete a "Senior Project".

1001420 **AP LANGUAGE AND COMPOSITION** - GRADE 12 - 1 CREDIT  
**Prerequisite: B average in previous honors courses.**

This course will help students develop their writing skills and an awareness of style and rhetoric largely derived

from a study of non-fiction literature. The students' chief practice in composition will be writing of expository, analytical, and argumentative essays, and they will learn how to compose in a variety of modes and for a variety of purposes. Vocabulary building as it relates to SAT, ACT, and AP testing is also studied. All students in the course will be expected to take the AP English Language and Composition exam in the spring.

## **DUAL ENROLLMENT LANGUAGE ARTS COURSES**

**ALL PREREQUISITES FOR DUAL ENROLLMENT MUST BE MET TO ENROLL IN THESE COURSES, INCLUDING ACCEPTABLE SCORES ON SAT, ACT, OR PERT.**

ENC1101  
ENC1102

**COMPOSITION I (DUAL CREDIT)** - GRADE 12 – 1 CREDIT

**COMPOSITION II (DUAL CREDIT)** - GRADE 12 – 1 CREDIT

**Prerequisite 1102: Minimum grade of “C” in ENC 1101 or equivalent**

These courses may be taken in lieu of 1 credit of Honors English IV. **ENC 1101** is a course in essay writing, incorporating some review of basic grammar, helping the student to develop skills in paragraph construction and concentrating on methods of presentation. It includes practice in critical reading and analysis of texts as well as an introduction to research and the proper documentation of sources. This course requires a minimum of 6,000 words of writing. **ENC 1102** includes advanced instruction in expository and other modes of prose writing, including the preparation and writing of a full-length research paper. This course also requires a minimum of 6,000 words of writing.

## **MATHEMATICS**

1200310

**ALGEBRA 1** - GRADES 9-12 - 1 CREDIT

The purpose of this course is to provide the foundation for more advanced mathematics courses and to develop the skills needed to solve mathematical problems. Topics shall include, but not be limited to, sets; variables; structure and properties of the real number system; first-degree equations/inequalities; relations and functions; graphs; systems of linear equations/inequalities; integral exponents; polynomials; factoring; rational algebraic expressions; irrational number; radical expressions; quadratic equations and mathematical problems.

1206300

**INFORMAL GEOMETRY** - GRADES 10-12 - 1 CREDIT

The purpose of this course is to develop the geometric knowledge that can be used to solve a variety of real-world and mathematical problems. Geometric relationships are developed inductively, with hands-on activities. The content of this course is less rigorous than Geometry, Course Number 1206310, and does not include formal deductive proofs.

1206310

**GEOMETRY** – GRADES 10-12 – 1 CREDIT

The purpose of this course is to emphasize critical thinking involving the discovery of relationships and their proofs and skill in applying the deductive method to mathematical situations. Topics shall include, but not be limited to, logic and reasoning, the study of Euclidean geometry of line, planes, angles, triangles, similarity, congruence, geometric inequalities, polygons and circles, area and volume, and constructions. This course contains a very strong algebraic content.

**Students are expected to provide a graphing calculator for the following courses:**

1206320

**GEOMETRY HONORS** - GRADE 9 - 1 CREDIT

**Prerequisite: grade of A or B in middle school Algebra I**

The purpose of this course is to give a rigorous in-depth study of geometry with emphasis on methods of proof and the formal language of mathematics. Topics shall include, but not be limited to, structure of geometry; separation properties; angle concepts; triangles, quadrilaterals; proofs; perpendicularity and parallelism in a plane and in a space; similar polygons; circles and spheres; constructions; area and volume; coordinate geometry and topology, and transformational geometry. This course contains a very strong algebraic content.

- 1207300      **LIBERAL ARTS MATHEMATICS I** – GRADES 10-12 – 1 CREDIT  
 The purpose of this course is to enable students to strengthen algebraic and geometric concepts and skills necessary for further study of mathematics and complete state testing requirements.
- 1200330      **ALGEBRA II** - GRADES 10-12 - 1 CREDIT  
**Prerequisite: Successful completion of Geometry**  
 The purpose of this course is to continue the study of the structure of Algebra and to provide the foundation for applying these skills to other mathematical and scientific fields. Topics shall include, but not be limited to, the review and extension of the structure and properties of the real number system; relation; functions and graphs; polynomials and rational expressions; quadratic equations and inequalities; polynomial functions, rational and irrational exponents; logarithm, complex number; and word problems.
- 1200340      **ALGEBRA II HONORS** - GRADES 10-12 - 1 CREDIT  
**Prerequisite: grade of A or B in Geometry Honors**  
 The purpose of this course is to present an in-depth study of the topics of Algebra II with emphasis on theory, proofs, and development of formulas, as well as their application. Topics variable solved algebraically and rational expressions; exponents and radicals, logarithms; complex numbers; conic sections; polynomial equation; sequences and series; permutation, combinations and probability; and matrices.
- 1200700      **MATHEMATICS FOR COLLEGE READINESS**- GRADES 11-12 - 1 CREDIT  
**Prerequisite: Successful completion of Algebra II**  
 The purpose of this course is to strengthen the skill level of high school seniors who have completed Algebra I, II, and Geometry, and who wish to pursue credit generating mathematics courses at the college level.
- 1201320      **ANALYSIS OF FUNCTIONS/TRIGONOMETRY (HONORS)** - GRADES 11-12 - 1 CREDIT  
**Prerequisite: Grade of A or B in Algebra II**  
 The purpose of this course is to develop and supplement the understanding of advanced mathematical topics below the level of calculus. The content includes polynomial and rational functions; exponential and logarithmic functions; sequences and series; mathematical induction; symbolic logic and set theory; matrix algebra; limits and continuity; vectors; probability and statistics; and extensive trigonometry.
- 1202340      **PRECALCULUS HONORS** - GRADES 11-12 - 1 CREDIT  
**Prerequisite: Successful Completion of Analysis of Functions or DC College Algebra**  
 This course is designed to prepare students for college-level mathematics, specifically Calculus I. Students will be expected to draw upon previous knowledge of Algebra II, Trigonometry, and College Algebra concepts with command.
- 1207310      **LIBERAL ARTS MATHEMATICS II** – GRADE 12 – 1 CREDIT  
**Prerequisite: Successful completion of Algebra I, Geometry, and Liberal Arts Mathematics I**  
 The purpose of this course is to enable students to strengthen algebraic and geometric concepts and skills necessary for further study of mathematics and complete state testing requirements. It is reserved as an option for seniors who are unsure about continuing their education after high school and do not feel prepared to take Algebra II.

### **DUAL ENROLLMENT MATH COURSES**

**ALL PREREQUISITES FOR DUAL ENROLLMENT MUST BE MET TO ENROLL IN THESE COURSES, INCLUDING ACCEPTABLE SCORES ON SAT, ACT, OR PERT.**

MAC1105 **COLLEGE ALGEBRA** - GRADES 11-12 -1 CREDIT  
**Prerequisite: A or B in Algebra II Honors or A in Math Analysis**

MAC1114 **TRIGONOMETRY** - GRADES 11-12 –1 CREDIT  
**Prerequisite: Grade of C or better in MAC 1105**  
Topics in this class include the real number system, circular functions, trigonometric functions, inverse relations and functions, trigonometric graphs, solutions of triangles and trigonometric equations, polar coordinates, and complex numbers.

MAC1140 **PRECALCULUS** - GRADES 12 -1 CREDIT  
**Prerequisite: MAC1105**

STA2023 **STATISTICAL METHODS** - GRADES 12 –1 CREDIT  
**Prerequisite: Grade of C or better in MAC 1105**

Topics in this class include the foundations of Calculus and collegiate statistical analysis. Students must have successfully completed MAC1105 College Algebra in order to take this subsequent sequence.

## **MEDIA**

8772110 **TELEVISION PRODUCTION I** - GRADES 9-12 - 1 CREDIT

The purpose of this course is to develop introductory skills in television production. The content includes television production terminology: the history of television and its role as an element of the mass media: television-related careers: writing for television: and basic equipment used in television productions, such as camcorders, microphones, audio and video mixers, and nonlinear computer editing. Student will also plan and create various video projects. Will meet graduation requirement for Performing Fine Arts.

8772120 **TELEVISION PRODUCTION II** - GRADES 10-12 - 1 CREDIT

The purpose of this course is to develop skills in using more advanced equipment for television production and to apply these skills in the production of television programs. The content includes further skill development, with equipment, such as camera control units, audio boards, editors, special effects generators, equipment for graphics preparation, and nonlinear computer editing. Additional units on screenwriting techniques, film review, and script analysis will be covered. Will meet graduation requirement for Performing Fine Arts.

8772130 **TELEVISION PRODUCTION III** - GRADES 11-12 - 1 CREDIT

**Prerequisite: Teacher Approval**

8772140 **TELEVISION PRODUCTION IV** - GRADES 11-12 - 1 CREDIT

**Prerequisite: Teacher Approval**

8773250 **TELEVISION PRODUCTION V HONORS** - GRADES 12 - 1 CREDIT

**Prerequisite: Teacher Approval**

8772160 **TELEVISION PRODUCTION VI HONORS** - GRADES 12 - 1 CREDIT

**Prerequisite: Teacher Approval**

The purpose of the above courses is to continue to develop and refine skills in using more advanced equipment for television production and to apply these skills in producing television programs. The content includes the continuing skill development in writing, producing, directing and editing television programs; advanced set design; and use of equipment such as camera control units, audio boards, editors, special effects generators, and equipment for graphics preparation. In addition, Television Production III through Advanced Television Production, students will be required to produce the school-wide Manta TV news programs, and complete specific production projects which may require after school hours to complete.

## **PHYSICAL EDUCATION/HEALTH**

1503350 **TEAM SPORTS I** - GRADES 9-12 - .5 CREDIT

1503360 **TEAM SPORTS II** - GRADES 9-12 - .5 CREDIT

The purpose of this course is to provide students with opportunities to acquire knowledge of strategies of team sports play, develop skills in selected team sports, and maintain and/or improve their personal fitness.

1501340 **WEIGHT TRAINING 1** - GRADES 10-12 - .5 CREDIT  
1501350 **WEIGHT TRAINING 2** - GRADES 10-12 - .5 CREDIT

The content includes knowledge of the importance of muscular strength and endurance, knowledge of health problems associated with inadequate levels of muscular strength and endurance. Knowledge of safety practices as it relates to weight training.

1501360 **WEIGHT TRAINING 3** - GRADES 10-12 - .5 CREDIT  
1501410 **POWER WEIGHT TRAINING 1** - GRADES 10-12 - .5 CREDIT

The content includes reinforcement of basic weight training knowledge, knowledge of safety practices, application of knowledge of designing and implementing a personal weight-training program.

1502410 **INDIVIDUAL AND DUAL SPORTS I** - GRADES 10-12 - .5 CREDIT  
1502420 **INDIVIDUAL AND DUAL SPORTS II** - GRADES 10-12 - .5 CREDIT

The purpose of this course is to provide students with opportunities to acquire knowledge of strategies of team sports play, develop skills in selected team sports, and maintain and/or improve their personal fitness.

1506320 **HOPE** - GRADES 9-12 – 1 CREDIT

Specific content shall include, but not be limited to, positive emotional development; communication, interpersonal and coping skills; responsible decision making and planning; nutrition and weight management; substance use and misuse, including the hazards of smoking; knowledge and skills need to be wise consumer; community resources; personal money management; performance of one-rescuer cardiopulmonary resuscitation (CPR) and first aid for obstructed airway.

1506320 **COMPREHENSIVE FITNESS** - GRADES 10-11 – 1 CREDIT

This course is for the student that is serious about athletic training for the purposes of participation in competitive sport. Students will participate in advanced aerobic and anaerobic training under a carefully designed regimen. Interested students should speak with their coach about participation in this course and the specific benefits to them.

## **N. J. R. O. T. C.**

The purpose of the NAVAL JUNIOR RESERVE OFFICERS TRAINING CORPS is to introduce students to the precepts of good citizenship, elements of leadership, value of scholarships in attaining life goals, and to engender a sound appreciation for the heritage and traditions of America. It also expresses the need for constituted authority in a democratic society.

The Navy supports the NJROTC. The program offers the opportunity to attend field trips in addition to attending NJROTC competitions at various cities throughout the state. The Naval Science course may be used as a substitute for "INTRO TO SOCIAL STUDIES". Additionally, students enrolled in NJROTC for the year are exempt from the HOPE graduation requirement.

1802300 **NAVAL SCIENCE I** - GRADES 9-12 - 1 CREDIT

The course will include on-going instruction in leadership theory, principles of health education, discussion of the nation in relation to the Navy, sea power, history of maritime events and American maritime heritage from ancient Greece to colonial America, introduction of ships, seamanship, navigation and maritime geography, drills, commands and ceremonies. ***\*\*After school commitments are a requirement and will constitute a portion of the total grade for the course.\*\****

1802310 **NAVAL SCIENCE II** - GRADES 9-12 - 1 CREDIT

Content will include on-going instruction in leadership theory, health education, naval orientation, and maritime history from the Civil War to World War I. It also introduces oceanography, practice in navigation, rules of the road, naval operations, communication, shipboard evolutions, intelligence and national security,

continues laboratory sessions in drills, commands, and ceremonies. **\*\*After school commitments are a requirement and will constitute a portion of the total grade for the course.\*\***

1802320 **NAVAL SCIENCE III** - GRADES 11-12 - 1 CREDIT

The course will include on-going instruction in leadership and discipline, naval orientation, and naval history of World War II. It will introduce meteorology, weather, astronomy, electricity and naval electronics, and survival training. Drills, commands, and ceremonies are continued. **\*\*After school commitments are a requirement and will constitute a portion of the total grade for the course.\*\***

1802330 **NAVAL SCIENCE IV** - GRADE 12 - 1 CREDIT

The purpose of this course is to broaden the knowledge of command, physical fitness, personnel inspection, and parade in company review. **\*\*After school commitments are a requirement and will constitute a portion of the total grade for the course.\*\***

## **SCIENCE**

2001310 **EARTH/SPACE SCIENCE** - GRADES 9-12 - 1 CREDIT

Earth Science is a *laboratory science course* that explores origins and the connections between the physical, chemical, and biological processes of the earth system. Students experience the content of Earth Science through inquiry-based laboratory investigations and focus on topics associated with matter, energy, cosmic evolution, and structure, cycles, geochemical processes, and the expanded time scales needed to understand events in the earth system. Earth Science provides the knowledge, skills, and habits of mind needed for problem solving and ethical decision making about scientific and technological issues. Earth Science is designed to cover several biological standards in preparation for the Florida Biology End-of-Course examination.

2001340 **ENVIRONMENTAL SCIENCE** - GRADES 9-12 - 1 CREDIT

Environmental science covers the impact and interaction of humans with the earth. Specific topics of coverage include: energy, pollution, resource management, and conservation.

2000310 **BIOLOGY I** - GRADES 9-12 - 1 CREDIT

This course includes: scientific method, scientific measurement, laboratory safety and use of apparatus, ecology, cell biology, cell reproduction, basic principles of genetics, biological changes through time, classification and taxonomy, microbiology, structure and function of plants, structure and function of animals, structure of and function of the human body, and collegial relationship. Laboratory activities may include dissections of plant, invertebrate, and/or non-mammalian specimens.

2000320 **BIOLOGY I HONORS** - GRADES 9-10 - 1 CREDIT

**Pre-requisite: B grades in science courses, Test Scores**

The purpose of this course is to provide exploratory experiences and laboratory and real-life applications in the biological sciences. The content should include, but not be limited to: the nature of science, including scientific methodology, measurement, laboratory apparatus and technologies and safety procedures; biochemistry-matter, energy and the chemical processes of life; cells- biology, reproduction and communication; genetics-principles, molecular basis, diversity and biotechnologies; levels of organization, classification and taxonomy; structure, function, and reproduction of plants, animals, and microorganisms; disease; behavior of organisms; ecology - ecological relationships: interdependence of organisms, humans, and the environment; evolution - biological selection, adaptations, and changes through time; and agricultural, food, and medical technologies and careers.

Laboratory activities may include dissections of plants, invertebrates, and/or non-mammalian specimens and tissues, organs, and/or full specimens (pig).

2000340 **AP BIOLOGY** - GRADES 10-12 - 1 CREDIT

**Pre-requisite: B grades in science courses, AP Contract**

AP Biology is a college-level course designed to prepare students for a comprehensive exam prepared by the College Board. Students will study biology at all levels of organizations. An emphasis on problem-solving skills and application of biological knowledge will be present. Student earning a passing score on the assessment may earn college credit at the college to which they matriculate.

2000350

**ANATOMY AND PHYSIOLOGY** - GRADES 10-12 - 1 CREDIT

**Pre-requisite: Earth/Space I and Biology/or Biology and Chemistry I.**

The purpose of this course is to enable students to develop understanding of the relationships between the structures and functions of the human body. This is a general interest course suggested for students interested in pursuing certain 2-year health care field degrees such as LPN, X-ray technician, respiratory therapy, etc. and cosmetology.

The content should include, but not be limited to: implementation of scientific habits of mind; application of scientific knowledge, methodology, and historical context to solve problems; use of laboratory technologies; anatomical terminology; cells and tissues; homeostasis; human genetics, growth and development; body composition, structure and function; internal and external changes and responses; and connections between anatomy, physiology, medicine, technology, society, and the environment.

Laboratory investigations may include dissections of non-mammalian specimens and tissues and/or mammalian tissues, organs and/or full specimens (cow, pig, sheep). .

2000360

**ANATOMY AND PHYSIOLOGY HONORS** - GRADES 10-12 - 1 CREDIT

**Prerequisite: B average in previous honors courses of Biology and Chemistry I**

The purpose of this course is to enable students to develop understanding of the relationship between the structures and functions of the human body. This course is highly recommended for those students intending to pursue a 4-year course of study leading to medical career (ex: physical therapy, veterinary or human medicine).

The course content is similar Anatomy and Physiology 200350 with additional emphasis on cellular physiology.

2002510

**MARINE SCIENCE I** – GRADES 10-12 – 1 CREDIT

The purpose of the course is to provide an overview of the marine environment. The content of the course facilitates an integrated study of all aspects of the marine environment, including physical, chemical, geological and biological processes. Laboratory investigations of selected topics will include the nature of science; the use of scientific method, measurement, safe and effective use of laboratory apparatus and field methods and technologies and may include dissections of non-mammalian specimens.

2002510

**MARINE SCIENCE I HONORS** – GRADES 10-12 – 1 CREDIT

This course is similar to Marine Science I, but will place additional focus on independent reading and writing, as well as more advanced experimentation procedures, data collection, and data analysis.

2002510

**MARINE SCIENCE II** – GRADES 11-12 – 1 CREDIT

**Pre-requisite: Marine Science I or Marine Science I Honors.**

The purpose of the course is to deepen students' understanding of the marine environment. The content of the course facilitates an integrated study of all aspects of the marine environment, including physical, chemical, geological and biological processes. Laboratory investigations are more rigorous and robust in the second year of Marine Science and students will learn about systems maintenance and operation of the Marine Science laboratory.

- 2002510 **MARINE SCIENCE II HONORS** – GRADES 11-12 – 1 CREDIT  
**Pre-requisite: Marine Science I or Marine Science I Honors.**
- This course is similar to Marine Science II, but will place additional focus on independent reading and writing, as well as more advanced experimentation procedures, data collection, and data analysis.
- 2003340 **CHEMISTRY I** - GRADES 10-12 - 1 CREDIT
- The purpose of this course is to provide students with the study of composition, properties, and changes associated with matter. Content shall include classification and structure of matter, atomic theory, periodic table, bonding, chemical reactions and balanced equations, behavior of gases, physical changes, acids, bases and salts, and energy associated with physical and chemical changes as well as organic chemistry, and nutritional chemistry. Laboratory investigations of selected topics in the content, which also include the use of the scientific method, measurement, laboratory apparatus and safety, are an integral part of the course.
- 2003350 **CHEMISTRY I HONORS** - GRADES 10-12 - 1 CREDIT  
**Prerequisite: B average in previous honors courses.**
- The purpose of this course is to provide students with a rigorous study of the composition, properties, and changes associated with matter. The content should include, but not be limited to, heat, changes of matter, atomic structure, periodic table, bonding, formulas and equations, mole concept, and gas laws. Laboratory investigations of selected topics in the content that also include the use of the scientific method, measurement, laboratory apparatus and safety are an integral part of the course.
- 2003370 **ADVANCED PLACEMENT CHEMISTRY** - GRADES 11-12 - 1 CREDIT  
**Prerequisite: A or B in Chemistry Honors, AP Contract**
- This course is designed to prepare the student to score a passing grade on the Advanced Placement test in chemistry. It is equivalent to a college introductory level chemistry course. The topics listed in Chemistry I Honors are covered in depth.
- 2003360 **CHEMISTRY II HONORS** - GRADES 10-12 - 1 CREDIT  
**Prerequisite: Enrollment in AP Chemistry**
- Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the high school level, all students should be in the science lab or field, collecting data every week. School laboratory investigations (labs) are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models.
- 2003390 **PHYSICS I HONORS** - GRADES 11-12 - 1 CREDIT  
**Prerequisite: A or B in previous science courses**
- The content should include, but not be limited to kinetics, dynamics, energy, work and power, heat and thermodynamics, wave characteristics, light, electricity, magnetism, and nuclear physics and sound. Problem solving is an integral part of this course. This course is lab based.
- 2001380 **AP ENVIRONMENTAL SCIENCE**: – GRADES 10-12 1 CREDIT  
**Prerequisite: A or B in Biology, AP Contract**
- This course approaches topics in environmental science by studying the impact of humans. Contemporary ecological issues are explored in relation to problems of local, regional, and global concern. Activities involve combined lecture, lab and field trip activities including discussions and debates of local problems, as well as national and global issues.
- 2000440 **GENETICS HONORS**: – GRADES 11-12 1 CREDIT  
**Prerequisite: Successful Completion of Biology and Chemistry**
- Honors Genetics is an equally rigorous laboratory science course for students that have an interest in genetics. The course utilizes concepts learned in Biology and Chemistry to investigate the role of

chromosomes in our lives. Studies will begin with a brief review of Mendelian Genetics, DNA structure and replication. Exploration of more modern genetic topics will follow, such as genetic engineering, cloning, stem cell research, DNA fingerprinting, genetic basis for disease, genetics of behaviors, and genetic technologies.

## **SOCIAL STUDIES**

### **2103400**      **AP HUMAN GEOGRAPHY** - GRADE 9 - 1 CREDIT

**Prerequisite: B in previous honors classes, AP Contract**

This course is designed to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students will examine the landscape to analyze human social organization and its environmental consequences. They will learn methods, models, and tools geographers use in their science and practice.

### **2109310**      **WORLD HISTORY** - GRADE 10 - 1 CREDIT

Specific content to be covered will include, but not be limited to, an understanding of prehistory, the rise of civilization and world cultures, Middle Ages and the Renaissance and Enlightenment in Europe. Content will also include the impact that the Industrial Revolution and Imperialism's had on the World, the influence of historical figures and events, as well as contemporary world affairs. Students may be assigned to select and read an approved historical novel each semester and then write a book report. A notebook will be assigned for organizing assigned work and from which tests will be made.

### **2109320**      **WORLD HISTORY HONORS** - GRADE 10 - 1 CREDIT

**Prerequisite: B average in previous social studies course**

The purpose of this course is to acquire a comprehensive understanding of the past and different historical interpretations. This is done by analyzing the political, economic, social, religious, military, dynastic, scientific, and cultural events that have shaped and molded humanity. An understanding of the historical method, the inquiry process, historical reasoning and interpretation, world issues and events is implicit. The content will include coverage of historical time periods from prehistory to contemporary world events. Homework will be assigned on an average of 2 to 3 nights a week. An approved historical novel will be assigned each 9 weeks. A book report on the novel read will be required. Homework and class work is organized in an assigned notebook that is graded regularly and the major source of test materials.

### **2109420**      **ADVANCED PLACEMENT WORLD HISTORY** - GRADE 10 - 1 CREDIT

**Prerequisite: B average in previous social studies course, AP Contract**

The purpose of the AP World History course is to develop greater understanding of the evolution of global processes and contacts in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. The course emphasizes relevant factual knowledge deployed in conjunction with leading interpretive issues and types of historical evidence. Focused primarily on the past thousand years of the global experience, the course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage prior to 1000 C.E.. Periodization, explicitly discussed, forms the organizing principle for dealing with change and continuity from that point to the present. Specific themes provide further organization to the course, along with the consistent attention to contacts among societies that form the core of world history as a field of study.

### **2100310**      **AMERICAN HISTORY** - GRADE 11 - 1 CREDIT

Specific content to be covered will include, but not be limited to, an understanding of geographic-historic and time-space relationships, the synthesizing of American settlements, the origin of American ideals, the American colonial experience, the American Revolution and Declaration of Independence, the formation of the Constitution and the federal system, the interpretive evolution of the Constitution over two centuries, sectional schisms in American life, the Civil War and Reconstruction, the technological and urban transformation of the country. The evolution of American lifestyles and ideals over the centuries, American foreign policy development, the cyclical development of the American economy, and contemporary domestic foreign issues.

2100320

**AMERICAN HISTORY HONORS** - Grade 11 - 1 Credit

**Prerequisites: B or higher in Honors World History and Honors English II**

The purpose of this course is to expand the student's critical thinking abilities in addition to increasing their knowledge of American History. Students should expect one "major" paper per quarter. All tests will be in short answer/essay format. In addition to the historical content, students will also discuss the historian's craft and learn to evaluate primary and secondary source materials. The course is taught in lecture/discussion format. There will be limited nightly homework outside of reading the textbook.

**Note: This course includes a strong literature component with many mandatory outside readings.**

2100330

**ADVANCED PLACEMENT AMERICAN HISTORY** - Grade 11 - 1 Credit

**Prerequisite: B in previous honors courses, AP Contract**

The AP program in United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Through writing and research, students should learn to assess historical materials - their relevance to a given interpretive problem, their reliability, and their importance - and to weigh the evidence and interpretations presented in historical scholarship.

2102310

**ECONOMICS** - Grade 12 - .5 Credit

Specific content will include, but not be limited to, use of economic reasoning and principles in reaching decisions in the market place. Necessary to that understanding are the roles and impact of economic incentives, specialization, comparative advantage, division of labor, interdependence, how markets work, savings and investment, the role of the citizen as producer, consumer, decision-maker, the role and function of government policy, the role of money, financial institutions and labor, distinctions between micro-economic problems, and the similarities and differences of other economic systems.

2106310

**AMERICAN GOVERNMENT** - GRADE 12 - .5 CREDIT

The content should include, but not be limited to, an analysis of those documents which shape our political traditions (the Declaration of Independence, the Constitution, and the Bill of Rights), a comparison of the roles of the three branches of government at the local, state, and national levels, an understanding of the evolving role of political parties and interest groups in determining government policy, how the rights and responsibilities of citizens in a democratic state have evolved and been interpreted, and the importance of civic participation in the democratic political process.

2106420/

2102320

**ADVANCED PLACEMENT AMERICAN GOVERNMENT/ECONOMICS HONORS**

GRADE 12 - 1 CREDIT

**Prerequisite: B average in previous honors and advanced placement courses, AP Contract**

**AP U. S. Government and Politics:** The Advanced Placement Program (AP) course and examination in United States Government and Politics are intended for qualified students who wish to complete studies in secondary schools equivalent to college introductory courses in U.S. Government. The AP program in United States Government and Politics is designed to provide students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs and ideas that constitute U. S. Politics. **Honors Economics:** A semester course offered to seniors enrolled in AP U.S. Government and Politics. This course will offer students a distinction between the body of theory that has been developed and the actual practices of governments, businesses and the consumer. Focus is placed on systematic ways of dealing with economic methods and fundamental choices made by consumers. Practical approaches to financial investments, credit and living on one's own will be emphasized.

2107300

**PSYCHOLOGY** - GRADES 10-12 - .5 CREDIT

Specific content to be covered will include, but not be limited to, the theories and methods of study employed by psychologists, human growth and development, self-concept development, adjustment, motivation and desire, intelligence, conditioning and learning, memory, personality and behavior, emotion and frustration, abnormal behavior, conformity, autonomy, alienation, stress, mental health, and therapy.

2108300 **SOCIOLOGY** - GRADES 10-12 - .5 CREDIT

Specific content to be covered will include, but not be limited to, an understanding of the methods of study employed by sociologists, social institutions and norms, social classes, relationships between the sexes, racial and ethnic groups, the handicapped, societal determinants, group behavior, the socialization process (including the transmission of group behavior), social deviation, social conflict, social roles, social stratification, social participation, and the role of social organizations and institutions (including their inter-relationships and inter-dependence).

2106370 **COMPREHENSIVE LAW STUDIES** - GRADES 10 -12 - 1 CREDIT

Specific content to be covered will include, but not be limited to, and understanding of the study of historical antecedents for law, constitutional guarantees of citizens, different kinds of laws, comparison of adults and juvenile justice systems, the value of law in society, the role of law enforcement officials, the importance of the adversarial relationships in American jurisprudence, the evolution of interpretations, social values and their impact on interpretations of the law, and the supremacy of the Constitution.

2106390 **COURT PROCEDURES** - GRADES 11-12 - .5 CREDIT

2106380 **LEGAL SYSTEMS** - GRADES 11-12 - .5 CREDIT

**Prerequisite: Completion of Comprehensive Law Studies**

The purpose of this course is to study the judiciary system of the United States and specifically of Florida. The content should include, but not be limited to, the structure, processes, and procedures of the county, circuit, appeals and civil courts; specific crimes and legal issues; juvenile law; the rights of the arrested courtroom procedure and efficiency; comparative legal systems; and career choices in the American judicial system.

## **DUAL ENROLLMENT SOCIAL STUDIES COURSES**

**ALL PREREQUISITES FOR DUAL ENROLLMENT MUST BE MET TO ENROLL IN THESE COURSES, INCLUDING ACCEPTABLE SCORES ON SAT, ACT, OR PERT.**

AMH2010 **HISTORY OF THE UNITED STATES TO 1865** - GRADES 11-12 -1 CREDIT

AMH2020 **HISTORY OF THE UNITED STATES FROM 1865 TO PRESENT** - GRADES 11-12 –1 CREDIT

## **CAREER & TECHNICAL**

### **AEROSPACE TECHNOLOGY**

8600620 **AEROSPACE ENGINEERING** – GRADES 9-12 - 1 CREDIT

This course provides students with an introduction to the knowledge, human relations, and technological skills found today in Aerospace Technologies. Additionally, this course is taught in conjunction with out articulation agreement with Embry-Riddle Aeronautical Academy, but one of their adjunct staff.

8600580 **AEROSPACE TECHNOLOGY 1** – GRADES 10-12 - 1 CREDIT

This course is taught as two courses that can be used as dual enrollment credits through Embry-Riddle University: AS120 Principles of Aeronautical Science and AS220 Unmanned Aircraft Systems. AS 120 Principles of Aeronautical Science is an introductory course in Aeronautical Science designed to provide the student with a broad-based aviation orientation in flight-related areas appropriate to all non-Aeronautical Science degree programs. Subjects include historical developments in aviation and the airline industry; theory of flight; airport operations; aircraft systems and performance; elements of air navigation; basic meteorology theory; air traffic principles; flight physiology; and aviation regulations and safety. Unmanned Aircraft Systems (UAS), emphasizing the military and commercial history, growth, and application of UASs. The course will include basic acquisition, use, and operation of UASs with an emphasis on operations. Proof of US citizenship is required for DB students.

8600680 **AEROSPACE TECHNOLOGY 2** – GRADES 10-12 - 1 CREDIT

This course is taught as a single course that can be used as dual enrollment credits through Embry-Riddle University: AS121 Private Pilot Operations. This course develops aeronautical knowledge required for certifications as a Private Pilot with an Airplane Single Engine Land Rating. Topics include: regulations, safety, pre-solo operations, cross-country planning, airspace, chart use, communications, weather, performance, weight and balance, aerodynamics, and decision-making.

8600680 **AEROSPACE TECHNOLOGY 3** – GRADES 11-12 - 1 CREDIT

This course is taught as two courses that can be used as dual enrollment credits through Embry-Riddle University: AS357 Flight Physiology and SP200 Planetary and Space Exploration. Flight Physiology explores aero-medical information. Topics include causes, symptoms, prevention, and treatment of flight environment disorders. Altitude effects, spatial disorientation, body heat imbalance, visual anomalies, and psychological factors are included as they relate to pilot performance and survival effectiveness.

## **BUSINESS EDUCATION**

8207310 **DIGITAL INFORMATION TECHNOLOGY** – GRADE 9-12 - 1 CREDIT

**Formerly: Computing for College and Careers**

This course is a standard elective offered to freshman. The course provides instruction in Microsoft Office applications and allows students to earn the industry certification for Microsoft Office. Students learn through a combination of online modules and the completion of projects *within PowerPoint, Word, Excel, Outlook, SharePoint, and Access*.

8216110 **INTERNATIONAL BUSINESS SYSTEMS** – GRADES 10-12 - 1 CREDIT

This course is designed to prepare students to live and work in a global economy. Students develop an understanding of business principles, management styles, economics, and customs which affect business systems in the international environment.

8216120 **INTERNATIONAL FINANCE AND LAW** GRADES 10-12 - 1 CREDIT

This course is designed to introduce students to the laws and regulations governing international trade including knowledge of import-export activities, banking, treaties, and currency exchange rates.

8203310/ **MANTA STAND & ACCOUNTING BUSINESS INTERNSHIP** - GRADE 12 – 2 CREDITS

**Prerequisite: International Business Systems & International Finance and Law**

The ***Manta Stand*** is a student-run school-based enterprise. Students work as employees and owners of a school store. Students will be exposed to different requirements in owning and operating a business such as: market analysis, marketing mix, legal requirements, equipment, supplies, inventory, physical layout, operations and staffing, and record keeping. **Accounting Business Internship:** This course is designed to provide students with the opportunity to stimulate their career interest in business. Students will also enhance and apply the instructional competencies learned in the classroom with the internship experience. Students will be able to develop human relations skills, communications and employability skills needed to secure a position in the business environment.

8205910 **DIGITAL DESIGN** - GRADES 10-12 - 1 CREDIT

The purpose of this course is to provide instruction in basic aspects of digital layout and design for the purposes of journalistic production. Students will be applying their skills to the production of the Lemon Bay yearbook. The content includes recognition of and writing copy, workshop experiences in photography layouts, advertising, printing, and other practical aspects of journalistic enterprise.

## **DIVERSIFIED CAREER TECHNOLOGY**

- 8303010 **DIVERSIFIED CAREER TECHNOLOGY I** - GRADES - 11-12 -1 CREDIT  
8303020 **DIVERSIFIED CAREER TECHNOLOGY II** - GRADE - 12 - 1 CREDIT  
8303030 **DIVERSIFIED CAREER TECHNOLOGY III** - GRADE - 12 - 1 CREDIT  
8300410 **ON THE JOB TRAINING (OJT)** - GRADES 11-12 - 1 CREDIT

DCT is a program designed for 11<sup>th</sup> and 12<sup>th</sup> grade students who desire on-the-job training through a cooperative method. One to three credits can be earned in one year through the DCT program. One DCT class is required each year to assist students with employability skills and job-related instruction. The DCT program prepares the student for employment and job advancement. It gives the student the opportunity to learn a useful skill on the job under actual working conditions.

## **DRAFTING & DESIGN TECHNOLOGY**

- 8401010 **TECH DRAFTING AND DESIGN 1** - GRADES 9-12 - 1 CREDIT

This course provides students with instruction in the characteristics and evolution of technology, underlying principles of design, and fundamental knowledge and skills in the use of illustration and drafting software. Included in the content is the use of essential application software. The ultimate output of this course is a design portfolio created by the student. Each item or product included in the portfolio should include a narrative description and an explanation of the technical approach or techniques used to create the item. Consideration should be given to having students present the portfolio using presentation software.

- 8401010 **TECH DRAFTING AND DESIGN 2** - GRADES 10-12 - 1 CREDIT

In this course, students learn more about the nature of design and drafting techniques for architectural purposes. Students are also provided with instruction in a variety of technical illustrations commonly produced to depict architectural concepts and designs. Students are expected to continue collating their portfolio using exemplars of their work. As with previous portfolio pieces, each exemplar should include a narrative description of the item with an explanation of any special techniques used to create the item.

- 8401010 **TECH DRAFTING AND DESIGN 3** - GRADES 11-12 - 1 CREDIT

In addition to exploring the implications of applying technologies, this course provides students with instruction in advanced imaging techniques relative to both static and animated illustrations. In addition to learning more advanced techniques, students will have an opportunity to research a project, design an appropriate solution, and present their results. The ultimate output of this course is the student's presentation of a completed portfolio illustrating their best exemplars. The portfolio should include a narrative description of the scenario, the approach to data collection, resulting renderings, and an interpretation of each chart/graph. Research references should be cited appropriately. Given the advanced nature of this course, students should be encouraged to produce the portfolio using presentation software suitable for dissemination via the Internet.

- 9410110 **FOUNDATIONS OF ROBOTICS** - GRADES 10-12 – 1 CREDIT

This course provides students with an introduction to the software applications and design principles of robotics. Students will have an opportunity to design and operate basic robotic systems and will also test for a certification in robotics. Students will also be exposed to the software associated with the design and use of 3-D printers.

## **FAMILY AND CONSUMER SCIENCES**

- 8800510 **CULINARY ARTS I** - GRADES 9-12 - 1 CREDIT

The purpose of this course is to prepare students for employment in the area of food service. This course covers planning, selecting, storing, purchasing, preparing and serving quantities of food products; use and care of equipment, serving techniques, and management skills. Hands on projects will include the preparation of lunches for faculty and staff, catering school social events, and the preparation and sale of holiday foods. Food safety and sanitation, reading and following a recipe, correct measuring techniques and attractive service of food will be included.

8800520 **CULINARY ARTS II** - GRADES 10-12 - 1 CREDIT

This course is a continuation of Culinary Arts I and may be taken for 1 credit. Students will plan, prepare, and serve food to faculty and staff and cater school social events.

8800530 **CULINARY ARTS III** - GRADES 11-12 - 1 CREDIT

This course is a continuation of Culinary Arts II and may be taken for 1 credit. Students will plan, prepare, and serve food to faculty and staff and cater school social events.

## **PUBLIC SERVICE**

0500370 **VOLUNTEER PUBLIC SERVICE** – GRADE 12- 0 CREDIT- Community Service Hours  
**Prerequisite: Application, Administrator Approval**

This course is open to seniors interested in helping department chairs, administrators, and office staff on the Lemon Bay High School Campus. In lieu of credits, students will be awarded community service hours for their time during the school day spent assisting in the operation of the school.

## **HEALTH SCIENCE**

8417110 **HEALTH SCIENCE II** – GRADES 10-12 - 1 CREDIT  
**Prerequisite: Anatomy & Physiology or Health Science I**

Students completing this course will be able to demonstrate knowledge of the health care delivery system, describe the legal and ethical responsibilities of the health care system, demonstrate an understanding of wellness and disease concepts, practice safety and security procedures in health care, recognize and respond to emergency situations, recognize and practice infection control procedures, demonstrate knowledge of blood borne pathogens standards, and apply basic medical math and science skills.

8417120 **HEALTH & WELLNESS 3** – GRADES 11-12 - 1 CREDIT  
**Prerequisite: Successful Completion of Health Science 2**

This course prepares students to be employed as Personal Trainers. Content includes, but not limited to, identifying and practicing within the appropriate scope of practice for a personal trainer, develop and implement exercise programs for apparently healthy individuals or those who have medical clearance to exercise, proficiency in the appropriate fitness equipment used, as well as a foundation in the musculo-skeletal system of the body. Upon completion of the course, students will be encouraged to take their