

Clark Advanced Learning Center

Curriculum Guide

2008-2009



2400 S.E. Salerno Road

Stuart, FL 34997

772-419-5750

www.clarkadvancedlearningcenter.org

CLARK ADVANCED LEARNING CENTER

2008-2009

Dear Students and Parents:

Welcome to the academic world of the Clark Advanced Learning Center. This Curriculum Guide outlines the programs and courses of study offered for students for the next school year. Registration time gives you an opportunity to stop, reflect and consider carefully your opportunities available here at CALC. Examine your goals for the future and the progress you are making towards meeting them. Your selections should support your efforts and develop your talents and skills.

Please take time to think carefully about the choices you are making. Your teachers and counselor are here to assist you and answer any questions you may have.

If you are new to the CALC, we will have an orientation session on August 16th at 1:00 p.m. in the Knowledge Room for new students. You will have the opportunity to meet our administrative team and take a tour of the campus. Returning student orientation will be held on August 16th at 9:00 a.m. in the Knowledge Room

I know that 2008-2009 will be the best school year yet for students here at CALC. We look forward to helping all of our students continue to be “Never less than the best!”

Maria T. Mosley, Executive Director
Susan Roark, Assistant Director

To learn more about the Clark Advanced Learning Center, please visit our website:
Clarkadvancedlearningcenter.org

TABLE OF CONTENTS

| | |
|---|--------|
| Welcome to Parents and Students | 2 |
| Educational Program | 4 |
| A. Curriculum | 4 |
| B. Accelerated Studies-Dual Enrollment | 4 |
| C. Programs of Study | 5 |
| Graduation Programs | 6 |
| <u>GENERAL EDUCATION COURSES</u> | |
| Language Arts | 8 |
| Mathematics | 9 |
| Leadership and Development Skills | 11 |
| Performing Fine Arts | 12 |
| Health/Physical Education | 12 |
| Research and Critical Thinking | 12 |
| SAT/PSAT/ACT Prep | |
| Science | 13 |
| Social Studies | 15 |
| Spanish | 17 |
| Other Courses | 17 |
| <u>CAREER TECHNOLOGY EDUCATION</u> | |
| Business Technology Education | 17 |
| Computer Education | 18 |
| Digital Design/Drafting | 19 |
| Medical Skills Education | 21 |
| <u>MAJOR AREAS OF INTEREST</u> | 22 |

EDUCATIONAL PROGRAM

A. Curriculum

The CALC's educational program includes integrated academic and applied technology programs that meet graduation requirements for a standard Florida High School Diploma and accelerate student progress toward an Associate degree. The educational program at the CALC is comprehensive. Students achieve high school and postsecondary course competencies through interdisciplinary project-based learning experiences. Learning strategies and materials are designed to accommodate the individual needs and optimize learning styles of each student. The use of technology is infused throughout the curriculum to enhance and deepen student mastery of the subject content. Course requirements include identified benchmarks from the Florida Sunshine State Standards that are most relevant to the course.

CALC high school academic courses are aligned with IRCC course offerings to provide maximum opportunities for dual enrollment. High school students are dual enrolled in their technical subject areas, and will also be dual enrolled in their academic subject areas to the greatest extent possible, provided they meet dual enrollment program and course prerequisites. A primary goal of the CALC is to allow students to earn the highest exit option possible by maximizing dual enrollment opportunities and structuring seamless "2+2" and "2+2+2" articulated program plans. The curriculum enables CALC students to earn IRCC credit up to and including an AA, AS, or AAS degree. The curriculum is structured to provide opportunities for students to meet the requirements of the Florida Bright Futures Scholarship Program. In addition, the location of the CALC on the IRCC Chastain Campus enables students to take advantage of IRCC's expanded curriculum, academic services, counseling, and other student support services.

B. Accelerated Studies – Dual Enrollment

The parameters of the CALC and IRCC dual enrollment program are set forth in the Inter-Institutional Articulation Agreement. Eligibility to participate in dual enrollment is defined in Florida Statute, State Board Rule, and the CALC Charter.

CALC students are eligible to participate in dual enrollment based on state-required GPA and placement score standards. Students who meet applicable placement score requirements and have an unweighted GPA of 3.00 or higher may participate in dual enrollment. Students who meet applicable placement score requirements and have an unweighted GPA of 2.00-2.99 may participate in dual enrollment on an exception basis. The Executive Director or designee may grant an exception based upon factors such as student progress, recent grade trends, nature of courses taken at the CALC and previous schools, performance on standardized exams, and overall academic record.

All college credit courses on the approved state dual enrollment list offered by IRCC are eligible for dual enrollment by CALC students. CALC students must meet all placement testing requirements associated with the course and must also meet all course prerequisites and co-requisites unless exempted by the appropriate IRCC administrator.

C. Programs of Study

1. Program Options

A key objective of the CALC is for students to graduate prepared to meet the needs of local and regional employment markets. The CALC's program options may change as warranted by employment and workforce trends. The following programs of emphasis were selected based upon input from the local business community:

- Digital Media
- E-Commerce
- Environmental Technology
- Information Technology/Cyber Security
- Medical Professions
- Customized Multi-Disciplinary (based on the student's career interests)

2. Curriculum Innovations

In addition to accelerated dual enrollment opportunities, the CALC curriculum incorporates the following instructional innovations identified through research as "educational best practices":

- Interdisciplinary Project-Based Learning
- Technology Integrated Throughout the Curriculum
- Senior Internships, Mentorships, and Job Shadowing
- Capstone Projects
- Learning Styles Inventory
- Students Assigned Laptops for 24/7 Technology Access
- E-Pep to Assess and Track Student Progress
- E-Portfolios to showcase accomplishments

Three Graduation Programs for Students Entering Grade Ten in 2008-2009 School Year

| Subject Area | Graduation Requirements of 26-Credit Program | Graduation Requirements of Three-Year, 18-Credit College Preparatory Program | Graduation Requirements of Three-Year, 18-Credit Career Preparatory Program |
|---|---|--|--|
| English | 4 credits, with major concentration in composition, reading for information, and literature | 4 credits with major concentration in composition and literature | 4 credits with major concentration in composition and literature |
| Mathematics | 4 credits, one of which must be algebra I or its equivalent, or a higher-level mathematics course | 3 credits at the algebra I level or above, from the list of courses that qualify for state university admission | 3 credits, one of which must be algebra I or its equivalent |
| Science | 3 credits in science, two of which must have a laboratory component | 3 credits in natural science, two of which must have a laboratory component | 3 credits in natural science, two of which must have a laboratory component |
| Social Studies | 1 credit world history 1 credit American history .5 credit American government .5 credit economics | 1 credit world history 1 credit American history .5 credit American government .5 credit economics | 1 credit world history 1 credit American history .5 credit American government .5 credit economics |
| Foreign Language | Not required for high school graduation, but required for admission into state universities | 2 credits in the same language or demonstrated proficiency in a second language | Not required |
| Fine Arts or Performing Arts | 1 credit in fine or performing arts, which may include speech and debate | Not required | Not required |
| Physical Education | 1 credit in physical education to include the integration of health | Not required | Not required |
| Major, Minor, or Electives | 10 credits 4 credits in a Major Area of Interest (MAI) 6 credits in elective courses, which may be combined to allow for a second Major Area of Interest, a minor area of interest (3 credits), individual elective courses, or intensive reading or mathematics intervention courses | 3 credits in electives | 3 credits in single vocational/career education program and 2 credits in electives <i>or</i> 3 credits in single career/technical certificate dual enrollment and 2 credits in electives <i>or</i> 5 credits in vocational/career education (including 3 credits in one sequential career and technical education program) |
| Totals | 26 | 18 | 18 |
| State Assessment Requirements | Passing scores on the Grade 10 FCAT or scores on a standardized test that are concordant with the passing scores on the FCAT (ACT or SAT) | Passing scores on the Grade 10 FCAT or scores on a standardized test that are concordant with the passing scores on the FCAT (ACT or SAT) | Passing scores on the Grade 10 FCAT or scores on a standardized test that are concordant with the passing scores on the FCAT (ACT or SAT) |
| Grade Point Average (GPA) Requirements | Cumulative GPA of 2.0 on a 4.0 scale | Cumulative weighted GPA of 3.5 on a 4.0 scale in required courses and a weighted or unweighted grade that earns at least 3.0 points or its equivalent in each of the 18 required credits | Cumulative weighted GPA of 3.0 on a 4.0 scale in required courses and a weighted or unweighted grade that earns at least 2.0 points or its equivalent in each of the 18 required credits |

**Three Graduation Programs for
Students Entering Grade Eleven and Twelve in 2008-2009 School Year**

| OPTION ONE TWENTY-SIX CREDIT TRADITIONAL DIPLOMA | OPTION TWO EIGHTEEN CREDIT COLLEGE PREPARATORY DIPLOMA | OPTION THREE EIGHTEEN CREDIT CAREER PREPARATORY DIPLOMA |
|--|--|---|
| <ul style="list-style-type: none"> • 4.0 Credits in English • 4.0 Credits in Math (Algebra I or higher) • 3.0 Credits in Science (2.0 with lab) • 0.5 Credit in LMS • 1.0 Credit in P.E. • 1.0 Credit in American History • 1.0 Credit in World History • 0.5 Credit in Economics • 0.5 Credit in American Government • 1.0 Fine and Performing /Practical Arts • 9.5 Electives including 0.5 in Emerging Technologies & 0.5 Internship | <ul style="list-style-type: none"> • 4.0 Credits in English • 3.0 Credits in Math (Algebra I or higher) • 3.0 Credits in Science (2.0 with lab) • 1.0 Credit in American History • 1.0 Credit in World History • 0.5 Credit in American Government • 0.5 Credit in Economics • 2.0 Credits in the same Foreign Language (or demonstrated proficiency in another language) • 3.0 Electives • At least 6 of 18 credits must be received in classes designated as dual enrollment, honors, AP, IB, AICE, or rigorous by Dept. of Education. • Cumulative weighted grade point average of 3.0 on a 4.0 scale or its equivalent in the courses required for graduation | <ul style="list-style-type: none"> • 4.0 Credits in English • 3.0 Credits in Math (1.0 must be Algebra I) • 3.0 Credits in Science (2.0 with lab) • 1.0 Credit in American History • 1.0 Credit in World History • 0.5 Credit in American Government • 0.5 Credit in Economics • 3 credits in a single occupational or career education program, 3 credits in career/technical dual enrollment, or 5 credits in occupational or career/technical courses. • 2.0 Electives unless 5 credits are earned as referenced above. |
| 26 Credits | 18 Credits | 18 Credits |

GENERAL EDUCATION COURSES

Language Arts

Basic Assumptions for Language Arts Education:

Reading, writing, speaking, listening, and viewing competencies are integrated throughout students' learning experiences. Benchmarks for the Sunshine State Standards are repeated as needed in course sequences. As students progress from one course to the next, increases should occur in the complexity of materials and tasks and in the students' independence in the application of skills and strategies. Learning tasks and materials accommodate the individual needs of students. Technology is available for students to develop competencies in the language arts.

Will meet graduation requirements for English

Course Number: 1001340

Course Title: English II

Credit: 1.0

The purpose of this course is to provide integrated educational experiences in the language arts strands of reading, writing, listening, viewing, speaking, language, and literature. The content should include, but not be limited to, the following: - using reading strategies to construct meaning from informative, technical, and literary texts -acquiring an extensive vocabulary through reading, discussion, listening, and systematic word study, using process writing strategies, student inquiry, and self-monitoring techniques -using speaking, listening, and viewing strategies in formal presentations and informal discussions -understanding and responding to a variety of literary forms -understanding and using language successfully to impact readers, writers, listeners, speakers, and viewers.

Course Number: 1001350

Course Title: English Honors II

Credit: 1.0

The purpose of this course is to provide integrated educational experiences in the language arts strands of reading, writing, listening, viewing, speaking, language, and literature. The content should include, but not be limited to, the following: using reading strategies to construct meaning from informative, technical, and literary texts -acquiring an extensive vocabulary through reading, discussion, listening, and systematic word study -using process writing strategies, student inquiry, and self-monitoring techniques -using speaking, listening, and viewing strategies in formal presentations and informal discussions understanding and responding to a variety of literary forms -understanding and using language successfully to impact readers, writers, listeners, speakers, and viewers

Course Number: 1001370

Course Title: English III

Credit: 1.0

The purpose of this course is to provide integrated educational experiences in the language arts strands of reading, writing, listening, viewing, speaking, language, and literature. The content should include, but not be limited to, the following: - using the reading process to construct meaning using technical, informative, and imaginative texts -using writing processes for various purposes with attention to style and format -using the research process and individual inquiry to locate, analyze, and evaluate information -using effective listening, speaking, and viewing strategies in informal and formal situations -understanding the power of language as it impacts readers, writers, listeners, viewers, and speakers - understanding and analyzing literary texts responding critically and aesthetically to literature

Course Number: 1001380

Course Title: English Honors III

Credit: 1.0

The purpose of this course is to provide integrated educational experiences in the language arts strands of reading, writing, listening, viewing, speaking, language, and literature. The content should include, but not be limited to, the following: - using the reading process to construct meaning using technical, informative, and imaginative texts -using writing processes for various purposes with attention to style and format -using the research process and individual inquiry to locate, analyze, and evaluate information -using effective listening, speaking, and viewing strategies in informal and formal situations -understanding the power of language as it impacts readers, writers, listeners, viewers, and speakers - understanding and analyzing literary texts -responding critically and aesthetically to literature

Course Number: 1001400

Course Title: English IV

Credit: 1.0

The purpose of this course is to provide integrated educational experiences in the language arts strands of reading, writing, listening, viewing, speaking, language, and literature. The content should include, but not be limited to, the following: - using the reading process to construct meaning using technical, informative, and imaginative texts -using writing processes for various purposes with attention to style and format -using the research process and individual inquiry to locate, analyze, and evaluate information -using effective listening, speaking, and viewing strategies in informal and formal situations -understanding the power of language as it impacts readers, writers, listeners, viewers, and speakers understanding and analyzing literary texts responding critically and aesthetically to literature

Course Number: 1001410

Course Title: English Honors IV

Credit: 1.0

The purpose of this course is to provide integrated educational experiences in the language arts strands of reading, writing, listening, viewing, speaking, language, and literature. The content should include, but not be limited to, the following: - using the reading process to construct meaning using technical, informative, and imaginative texts -using writing processes for various purposes with attention to style and format -using the research process and individual inquiry to locate, analyze, and evaluate information -using effective listening, speaking, and viewing strategies in informal and formal situations -understanding the power of language as it impacts readers, writers, listeners, viewers, and speakers - understanding and analyzing literary texts - responding critically and aesthetically to literature

Course Number: 1009320

Course Title: Creative Writing

Credit: 0.5

The purpose of this course is to enable students to develop and use fundamental writing and language skills for creative expression in a variety of literary forms. Emphasis will be on development of a personal writing style. The content should include, but not be limited to, the following: -analysis of literary models -impact of audience, purpose, and writing mode -writing process strategies -personal writing style - various creative writing experiences -peer review techniques publication of final products

ENC1101 English Composition I (P)*3 credits

This course presents the rhetorical principles of modern and classical essays, which in practical application enable students to compose college level expository and argumentative essays. This course contains a required speech component. Student will demonstrate college-level writing skills through multiple assignments. Prerequisite: Student must score into college-level reading and English on placement test or complete ENC 0001 with a grade of "C" or higher.

ENC1102 English Composition II (P)* 3 credits

This course emphasizes critical thinking through the study of literature and develops skills in writing research essays for analytical, argumentative, and expository purposes. Student will demonstrate college-level writing skills through multiple assignments. Prerequisite: ENC 1101 and student must place into college-level reading on placement test.

AML2010 American Literature to 1865 (P)*3 credits

This course provides an introduction to American literature based upon selected verse and prose masterpieces from colonial times to 1865. Student will demonstrate college-level writing skills through multiple assignments. Prerequisite: ENC 1101 or permission of instructor and

student must score into college-level reading on placement test.

AML2020 American Literature after 1865 (P)*3 credits

This course provides an introduction to American literature based upon selected verse and prose masterpieces from 1865 to the present. Student will demonstrate college-level writing skills through multiple assignments. Prerequisite: ENC 1101 or permission of instructor and student must score into college-level reading on placement test.

ENL 2012 English Literature to 1798 (P)* 3 credits

This course provides an introduction to English literature based upon selected masterpieces from Beowulf to Samuel Johnson. Student will demonstrate college-level writing skills through multiple assignments. Prerequisite: ENC 1101 or permission of instructor and student must score into college-level reading on placement test.

ENL 2022 English Literature after 1798 (P)* 3 credits

This course provides an introduction to English literature based upon selected masterpieces from the Romantic Movement to the present. Student will demonstrate college-level writing skills through multiple assignments. Prerequisite: ENC 1101 or permission of instructor and student must score into college-level reading on placement test.

Mathematics

Will meet graduation requirements for Mathematics

Course Number: 1200330

Course Title: Algebra II

Credit: 1.0

The purpose of this course is to continue the study of algebra and to provide the foundation for applying algebraic skills to other mathematical and scientific fields. The content should include, but not be limited to, the following: -structure and properties of the complex number system -arithmetic and geometric sequences and series relations, functions and graphs extended to polynomial, exponential, and logarithmic functions -varied solution strategies for linear equations, inequalities, and systems of equations and inequalities -varied solutions strategies, including the quadratic formula, for quadratic equations -conic sections and their applications -data analysis, including measures of central tendency and dispersion -probability, permutations, and combinations

Course Number: 1200340

Course Title: Algebra II Honors

Credit: 1.0

The purpose of this course is to continue the study of algebra and to provide the foundation for applying algebraic skills to other mathematical and scientific fields. The content should include, but not be limited to, the following: -structure and properties of the complex number system -arithmetic and geometric sequences and series-relations, functions and graphs

extended to polynomial, exponential, and logarithmic functions -varied solution strategies for linear equations, inequalities, and systems of equations and inequalities -varied solutions strategies, including the quadratic formula, for quadratic equations -conic sections and their applications -data analysis, including measures of central tendency and dispersion -probability, permutations, and combinations

Course Number: 1206310

Course Title: Geometry

Credit: 1.0

The purpose of this course is to develop the geometric relationships and deductive strategies that can be used to solve a variety of real world and mathematical problems. The content will include, but not be limited to, the following: -geometric constructions -terminology and fundamental properties of geometry -deductive and inductive reasoning and their application to formal and informal proof -formulas pertaining to the measurement of plane and solid figures -coordinate geometry and transformations on the coordinate plane -exploration of geometric relationships such as parallelism, perpendicularity, congruence, and similarity -properties of circles -right triangle trigonometry

Course Number: 1206320

Course Title: Geometry Honors

Credit: 1.0

The purpose of this course is to develop the geometric relationships and deductive strategies that can be used to solve a variety of real world and mathematical problems. The content will include, but not be limited to, the following: -geometric constructions -terminology and fundamental properties of geometry -deductive and inductive reasoning and their application to formal and informal proof -formulas pertaining to the measurement of plane and solid figures -coordinate geometry and transformations on the coordinate plane -exploration of geometric relationships such as parallelism, perpendicularity, congruence, and similarity -properties of circles -right triangle trigonometry

Course Number: 1201300

Course Title: Mathematical Analysis

Credit: 1.0

The purpose of this course is to enable students to extend knowledge of functions, acquire additional modes of mathematical reasoning at an introductory level, and develop skills necessary for the study of calculus. The content should include, but not be limited to, the following: -polynomial and rational functions -exponential and logarithmic functions -sequences and series -mathematical induction -symbolic logic and set theory -matrix algebra -limits and continuity -vectors

Course Number: 1207330

Course Title: Integrated Mathematics III

Credit: 1.0

The purpose of this course, the final in a series of three, is to develop the advanced algebraic and geometric concepts and process that can be used to solve a variety of real-world and

mathematical problems. The content should include, but not be limited to, the following: structure and properties of the complex number system, relations, functions, and graphs extended to exponential and logarithmic, functions and their relationships to one another, operations with matrices, conic sections and their applications, proofs of trigonometric identities, application of trigonometry and the properties of similarity and congruence of triangles, data analysis, including measures of central tendency and dispersion, probability, permutations, and combinations.

Course Number: 1210300

Course Title: Probability and Statistics with Applications

Credit: 1.0

The purpose of this course is to enable students to develop and apply knowledge of statistics and probability to design experiments, collect and analyze data, and reach appropriate inferences and conclusions. The content should include, but not be limited to, the following: -collecting, organizing, and analyzing data -measures of central tendency and variability -regression analysis, including correlation and analysis of residuals -analysis of experimental design -probability, including permutations and combinations -randomness and sampling -binomial and normal distributions -hypothesis testing, including use of confidence intervals -data transformation (scaling/rescaling data sets) -use of graphing calculator and spreadsheets

Course Number: 1211300

Course Title: Trigonometry

Credit: 0.5

The purpose of this course is to study circular and trigonometric functions and their applications. The content will include, but not be limited to, the following: circular and trigonometric functions and their inverses, trigonometric identities, graphs of trigonometric functions and their inverses, trigonometric equations, solutions of right and oblique triangles, trigonometric form of complex numbers.

Special Note. Students earning credit in Pre-Calculus may not earn credit in both Trigonometry and Analytic Geometry.

Course Number: 1201310

Course Title: Analysis of Functions

Credit: 1.0

The purpose of this course is to enable students to develop advanced mathematics knowledge and skills in algebra, trigonometry, and statistics and probability, using functions as a unifying theme. The content should include, but not be limited to, the following: -statistical measures, distributions, and graphs -polynomial and rational functions -trigonometric and circular functions -exponential and logarithmic functions -probability measures and distribution

Course Number: 1206330

Course Title: Analytic Geometry

Credit: 0.5

The purpose of this course is to develop an understanding of the relationship between algebra, geometry, and trigonometry. The content will include, but not be limited to, the following: linear equations, graphs and curve sketching, Cartesian and polar coordinate systems, analytic proofs, vectors, conic sections, including transformations of axes, equations and graphs in polar form.

Course Number: 1202340

Course Title: Pre-Calculus

Credit: 1.0

The purpose of this course is to enable students to develop concepts and skills in advanced algebra, analytic geometry, and trigonometry. The content should include, but not be limited to, the following: trigonometric functions and their inverses, trigonometric identities and equations, vectors and parametric equations, structure and properties of the complex number system, polar coordinate system, sequences and series, concept of limits, conic sections, polynomial, rational, exponential, and logarithmic functions, and matrix algebra.

Course Number: 1202300

Course Title: Calculus

Credit: 1.0

The purpose of this course is to enable students to develop knowledge and skills in calculus concepts while strengthening and extending concepts learned in previous mathematics courses. The content should include, but not be limited to, the following: functions, limits and continuity, derivatives and their applications, anti-derivatives, definite integrals and their applications.

MAT1033 Intermediate Algebra (P) 3 credits

This course covers the following topics: factoring, algebraic fractions, radical and rational equations, complex numbers, quadratic equations, rational equations, linear equations, and inequalities in two variables and their graphs, systems of linear equations and inequalities, and introduction to functions. Prerequisite: MAT 0024 with a grade of “C” or higher, or placement scores.

MTG2204 Elementary Geometry (P)* 3 credits

This course presents the content of elementary geometry. Topics include lines and angle relationships, properties of parallel lines, congruency and similarity in triangles, types of quadrilaterals, area, volumes, and properties of circles. Methods of proof using logic principles and compass and straight-edge construction are emphasized throughout. Prerequisite: MAT 1033 with a grade of “C” or higher, or placement scores.

MAC1105 College Algebra (P)* 3 credits

This course covers the following topics: functions and functional notation, domain and ranges of functions, graphs of This

functions and relations, operations on functions, inverse functions, polynomial and rational functions, absolute value and radical functions, exponential and logarithmic properties, functions, and equations; and systems of equations and inequalities. A graphics calculator is required for this course. Prerequisite: MAT 1033 with a grade of “C” or better, or placement scores

STA 2023 Elementary Statistics I (P)*3 credits

This course includes measures of central tendency and variability, probability, random variables, normal and binomial distributions, confidence intervals, tests of hypotheses, correlation and simple linear regression, descriptive and inferential techniques and concepts which apply to sample data which has been gathered from a population. Prerequisite: MAT 1033 with a grade of “C” or higher (MAC 1105 is recommended), or placement scores.

MGF 2106 Mathematics for Liberal Arts I (P)* 3 credits

This course includes logic, geometry, probability and counting principles, descriptive statistics, sets and Venn diagrams, reasoning patterns, and a history of mathematics. The purpose of MGF 2106 is to present the utility of mathematics to students who do not intend to take other mathematics courses. MGF 2106 is not open to students with credit in MGF 2202. Prerequisite: MAT 1033 with a grade of “C” or higher or placement scores.

MGF 2107 Mathematics for Liberal Arts II (P)* 3 credits

This course includes topics from financial mathematics, linear and exponential growth, decay numbers and number systems, elementary number theory, right triangle trigonometry, and a history of mathematics. The purpose of MGF 2107 is to present the utility of mathematics to students who do not intend to take other mathematics courses. Prerequisite: MAT 1033 with a grade of “C” or higher or placement scores.

Leadership and Development Skills

Course Number: 2400300

Course Title: Leadership Skills Development

Credit: 1.0

The purpose of this course is to teach leadership skills, parliamentary procedure, problem solving, decision making, communication skills, group dynamics, time and stress management, public speaking, human relations, public relations, team building, and other group processes. The content should include, but not be limited to, the following: study in self understanding – development in such areas as goal setting, self actualization and assertiveness – study of organizational theories and management

Course Number: 2400310

Course Title: Leadership Techniques

Credit: 1.0

This course will provide an in-depth study of the leadership techniques of decision making, problem solving, meeting

skills, communication, group conflict reduction, time and stress management, evaluation, team building, group dynamics, motivational strategy, and the role of leadership in a democratic society. The content should include, but not be limited to, the following: -study in self-understanding - development in self-esteem, goal setting, and character building -enhance leadership skills and learn to follow for functioning in a group setting and the community

Performing Fine Arts

Course Number: 0109310

Course Title: Portfolio I

Credit: 1.0

The purpose of this course is to develop containing an artist's statement and a diverse range of the student's own works of art. The content should include, but not be limited to the following: -characteristics and uses of portfolios – portfolio management and inventory – artist's statement – criteria for selecting works of art for inclusion – media, technology, processes, and techniques – quality, concentration and breadth – critical evaluation – presentation of works of art – historical, cultural and other influences – career opportunities.

Health/Physical Education

Course Number: 1502480

Course Title: Outdoor Education

Credit: 0.5

The purpose of this course is to enable students to acquire knowledge of outdoor education, develop skills in outdoor education activities, such as hiking, biking, orienteering, and water sports; and maintain or improve health related fitness. The content should include, but not be limited to, the following: safety practices – rules and terminology – history – biomechanical and physiological principles, - techniques – interaction skills – fitness activities – fitness assessment – consume issues – benefits of participation

Course Number: 1506310

Course Title: HOPE-Health Education Variation

Credit: 1.0

The purpose of this course is to develop and enhance healthy behaviors that influence lifestyle choices and student health and fitness. The content should include, but not be limited to, the following: -apply fitness and health concepts -risk and benefits of varying fitness levels -development of an individual wellness plan -responsible decision making - development of an individual nutrition plan -completion of a behavior change project -safety and injury prevention – (hydration, injury, violence, environmental issues, CPR) - safety education practices -analyzing consumer information and community resources -mental and emotional health, including depression and suicide -stress management -coping skills -interpersonal communication – communication, relationships, sportsmanship -disease prevention and control –

risk factor assessments, includes communicable and non-communicable diseases such as HIV/AIDs, other STDs, heart disease, diabetes, cancers, asthma -tobacco, alcohol, and other drug use and abuse – risk and protective factors -advocating for health and fitness promotion -technology application to facilitate health and fitness

HLP1081 Personal Wellness (P) 3 credits

This course establishes in students a lifestyle conducive to total wellness, which involves an awareness and appreciation for the values of holistic health and physical fitness.

Research and Critical Thinking SAT/ PSAT/ ACT Prep

Course Number: 129830A

Course Title: Advanced Topics in Mathematics

Credit: 0.5

The purpose of this course is to enhance and continue the study of mathematics after Algebra I, II, and Geometry. The content should include, but not be limited to, the following: learning strategies for acquiring, storing, and retrieving information, test-taking skills and strategies, and strategies for linking new information with prior knowledge.

Course Number: 1700370

Course Title: Critical Thinking and Study Skills (SAT Prep)

Credit: 0.5

The purpose of this course is to enable students to develop learning strategies, critical-thinking skills, and problem-solving skills to enhance their performance in academic and nonacademic endeavors. The content should include, but not be limited to, the following: learning strategies, strategies for acquiring, storing, and retrieving information, strategies for oral and written communication, time management and organizational skills, critical-thinking operations, processes, and enabling skills, test-taking skills and strategies, and strategies for linking new information with prior knowledge.

Course Number: 1700300

Course Title: Research I

Credit: 1.0

The purpose of this course is to enable students to develop fundamental knowledge of the steps in the research process. The content should include, but not be limited to, the following: nature and purpose of research, research questions and hypotheses, review of literature and other resources, research methods and procedures, report formats, styles, and content, directed investigations, and critical analysis of research. This and following course numbers are used for students who continue in Leadership classes.

Course Number: 1700310

Course Title: Research II

Credit: 1.0

Course Number: 1700320
Course Title: Research III
Credit: 1.0

Course Number: 1700330
Course Title: Research IV
Credit: 1.0

Course Number: 170380
Course Title: Career Research and Decision Making
Credit: 0.5

The purpose of this course is to enable students to make informed career choices and develop the skills needed to successfully plan and apply for college or a job. The content should include, but not be limited to, the following: -goal-setting and decision-making processes -self-assessment -sources of career information -occupational fields and educational requirements -postsecondary education and training opportunities -writing, listening, viewing, and speaking skills for applications and interviews -sources of educational financial assistance -career planning

Course Number: 0500510
Course Title: Personal, Career and School Development Skills II
Credit: 1.0

The purpose of this course is to provide students who have been designated as at-risk of dropping out of high school with varied experiences in continuing to achieve success in school, personal growth through individual and group processes, and improved attitudes and behaviors towards learning, self, school, and community. Through enrollment in this class, students (and their families) are connected with public and private health employment, counseling and social services. The private sector is involved in the collaboration in a variety of ways. These include tutoring of students, mentoring, serving as guest speakers or workshop leaders, donating materials/equipment/facilities, providing financial/in-kind support for motivation and recognition awards, offering work experience or job-shadowing opportunities, funding scholarships. Institutions of higher education also join the partnership by providing interns tutors, mentors and scholarships. The content should include, but not be limited to, the following: -refining understandings previously acquired in Cities in Schools courses in areas such as knowledge of self and others -development of positive attitudes -relationships -peer pressure -individual responsibility -goal setting -time management -decision making -problem solving -leadership skills -life management skills -employability skills -career planning

SLS1932 – Special Topics in Study Skills (O) 3 credits
This course aids the student in the development and enhancement of skills and techniques that help ensure the student's success in a particular degree or certificate program

Science

Will meet graduation requirement for Science

Course number 200320
Course Title: Physical Science Honors
Credit 1.0

The purpose of this course is to provide opportunities to study the concepts of matter, energy, and forces, and their applications through exploratory investigations and activities. The content should include, but not be limited to, the following: -unifying concepts and processes of science-structure of atoms-structure and properties of matter-chemical reactions-entropy and conservation of energy-interactions of energy and matter-motions and forces-interactions among science, technology, and society

Course Number: 2003350
Course Title: Chemistry I Honors
Credit: 1.0

The purpose of this course is to study the composition, properties, and changes associated with matter, and their applications. The content should include, but not be limited to, the following: -the nature of science-matter: its classification, structure, and changes-atomic theory-the periodic table-bonding-chemical formulas, chemical reactions, and balanced equations-stoichiometry-reaction rates and equilibrium-acids and bases-oxidation and reduction-behavior of gases-dynamics of energy-chemistry of life

Course Number 2002510
Course Title: Marine Science I Honors
Credit 1.0

The purpose of this course is to provide an overview of the marine environment. The content should include, but not be limited to, the following: -the nature of science -the origins of the oceans -the chemical, physical, and geological aspects of the marine environment -ecology of various sea zones -marine communities -the diversity of marine organisms -characteristics of major marine ecosystems -characteristics of major marine phyla/divisions -the interrelationship between man and the ocean

Course Number: 2001340
Course Title: Environmental Science
Credit: 1.0

The purpose of this course is to study man's interaction with the environment. The content should include, but not be limited to, the following: forms of pollution, conservation, environmental planning and policy, public land usages, population dynamics, and major forms of energy.

Course Number: 2001310

Course Title: Earth/Space Science

Credit: 1.0

The purpose of this course is to develop and apply concepts basic to the Earth, its materials, processes, history, and environment in space. The content should include, but not be limited to, the following: the nature of science; the universe and the solar system; the developmental cycle of stars; the earth-moon system; space exploration; formation of igneous, sedimentary, and metamorphic rocks and identification and classification of rocks and minerals; geological divisions of the earth; formation of land forms and basic mountain types; fundamentals of plate tectonics; formation of rivers and water systems; glaciers; hydrologic cycle; physical oceanography; meteorology, including development of hazardous weather, weather mapping, weather systems, frontal development, and satellite imagery; types of soils and erosion; renewable and nonrenewable energy resources

Course Number: 2000330

Course Title: Biology II

Credit: 1.0

The purpose of this course is to enable students to develop knowledge of biology by expanding and applying biological concepts introduced in Biology I or Biology I Honors. The content should include, but not be limited to, the following: implementation of scientific habits of mind; application of scientific knowledge, methodology, and historical context to solve problems; use of laboratory technologies; terminology; properties of life; metabolic pathways; chemical basis of heredity and biotechnology; unity and diversity; change mechanisms; morphological differences; relationships among individuals, populations, communities, and ecosystems; connections between biology, technology, society, and the environment

Course Number 2002430

Course Title Integrated Science II Honors

Credit 1.0

This purpose of this course is to provide opportunities to investigate the theories and ideas associated with the biological, earth, and physical sciences in a way that is relevant and usable. Students construct science knowledge by formulating questions, making predictions, planning experiments, making observations, classifying, interpreting and analyzing data, drawing conclusions, and communicating. The content should include, but not be limited to, the following: -the nature of science-the nature of matter-energy-force and motion-processes that shape the Earth-Earth and space-processes of life-how living things react with their environment

Course Number 2002450

Course Title Integrated Science III Honors

Credit 1.0.

This purpose of this course is to provide opportunities to investigate the theories and ideas associated with the biological, earth, and physical sciences in a way that is relevant and usable. Students construct science knowledge by

formulating questions, making predictions, planning experiments, making observations, classifying, interpreting and analyzing data, drawing conclusions, and communicating. The content should include, but not be limited to, the following: -the nature of science-the nature of matter-energy-force and motion-processes that shape the Earth-Earth and space-processes of life-how living things react with their environment

BSC1005 Life Science (P) 3 credits

This introductory-level course is designed for non-science majors. It illustrates the applications of the scientific method of problem solving within the field of life science. Topics of the investigation include properties of life, chemistry of life, structure and function of cells, cell reproduction, plant structure and function, and representative human systems. Prerequisite: Student must score into college-level reading on placement test. Course available on Internet.

BSC1005L Life Science Lab (P) 1 credit

This lab course is designed for non-science majors. Students gain laboratory experiences in the areas of properties of life, chemistry of life, structure and function of cells, cell reproduction, plant structure and function, and representative human systems. Prerequisite: Student must score into college level reading on placement test. Prerequisite/Corequisite: BSC 1005.

BSC2010 General Biology I (P)* 3 credits

This biology course is designed for science majors. The course covers cell structure and function, the chemical basis for life, cell metabolism, cell reproduction and inheritance, and a survey of viruses, bacteria, and fungi. It is recommended that students taking this course continue in BSC 1011. Prerequisite: Student must score into college-level mathematics and reading on placement test. Recommended Prerequisite/Corequisite: CHM 1045 or CHM 1020. Corequisite: BSC 1010L.

*Students who have completed BSC 1005 cannot meet their science requirement for graduation by taking BSC 1010. If BSC 1010 and BSC 1010L are needed, BSC 1005 counts only as an elective.

BSC2010L General Biology I Lab (P) 1 credit

This is the lab component for General Biology I. Lab experiences include the following topic areas of cell structure and function, the chemical basis for life, cell metabolism, cell reproduction and inheritance, viruses, bacteria, and fungi. Prerequisite: Student must score into college level mathematics and reading on placement test. Prerequisite/Corequisite: BSC 1010.

BSC2093 Anatomy and Physiology I (P) 3 credits

As the first semester of a two-semester sequence, this course studies regional and systemic anatomy and physiology of the human body. Emphasis is placed on

histology and the integumentary, skeletal, muscular, and nervous systems. During the first two weeks of class, students are tested in prerequisite materials such as simple chemistry, cell structure, biochemistry, metabolism, and molecular genetics. Prerequisite: BSC 1010 and BSC 1010L and student must score into college level mathematics and reading on placement test. Corequisite: BSC 2093L.

BSC2093L Anatomy and Physiology I Lab (P) 1 credit

This is the lab component for Anatomy and Physiology I. Lab experiences include the following topic areas of histology and the integumentary, skeletal, muscular, and nervous systems. Prerequisite: Student must score into college level mathematics and reading on placement test. Prerequisite/Corequisite: BSC 2093.

BSC2094 Anatomy and Physiology II (P) 3 credits

This is a continuation of BSC 2093, studying the anatomy and physiology of human systems. Topics to be covered are the circulatory, digestive, respiratory, excretory, endocrine, and reproductive systems. Prerequisite: BSC 2093, BSC 2093L. Corequisite: BSC 2094L.

BSC2094L Anatomy and Physiology II Lab (P) 1 credit

This is the lab component for Anatomy and Physiology II. Lab experiences include the following topic areas of circulatory, digestive, respiratory, excretory, endocrine, and reproductive systems. Prerequisite: BSC 2093, BSC 2093L. Prerequisite/Corequisite: BSC 2094.

OCB1010 Introduction to Marine Biology (P) 3 credits

This course is an introductory study of marine and estuarine waters as biological environments. Emphasis is placed on the major marine phyla in the local area and the interrelationships between those phyla.

OCB1010L Introduction to Marine Biology Lab (P) 1 credit

This course is the lab for Introduction to Marine Biology. This course studies marine and estuarine waters as biological environments. Emphasis is placed on the major marine phyla in the local area and the interrelationships between those phyla. Field trips to local marine and estuarine areas are required. Prerequisite/Corequisite: OCB 1010.

OCE2001 Introduction to Oceanography (P) 3 credits

This course introduces fundamentals, principles, and procedures of physical, geological, chemical, and biological oceanography.

PCB1030 Introduction to Ecology (P) 3 credits

This course provides a survey of the interrelationships between living organisms and their physical environment, including an overview of animal and plant physiology, chemical cycles, and the various ecosystems on earth. Present day ecological problems are discussed, along with ecological aspects of humans and implications for the

future. Prerequisite: Student must score into college level reading on placement test.

CHM1020 Introduction to Chemistry (P) 3 credits

This course teaches introductory chemical principles and applications for the non-science major. Topics include the scientific method of problem solving, classification of matter, the periodic table, chemical reactions, energy, chemical bonds, and acid-base chemistry. Student must score into college level English, mathematics and reading on placement test

CHM1045 General Chemistry I (P) 3 credits

This course is a study of the principles of chemistry, atomic and molecular structure, chemical bonding, properties of gases, stoichiometry, liquids, and solids. Prerequisite: MAT 1033 and student must score into college level reading on placement test. Corequisite: CHM 1045L.

CHM1045L General Chemistry I Lab (P) 1 credit

This course is the laboratory for CHM 1045. Lab experiments include the topics of principles of chemistry, atomic and molecular structure, chemical bonding, properties of gases, stoichiometry, liquids, and solids. Prerequisite: Student must score into college level mathematics and reading on placement test. Pre/Corequisite: CHM 1045.

Social Studies

Will meet graduation requirement for World History

Course Number: 2106320

Course Title: American Government Honors

Credit: 0.5

The purpose of this course is to enable students to gain an understanding of American government and political behavior that is essential for effective citizenship and active involvement in a democratic American society.

The content should include, but not be limited to, the following: -interrelationship between American government and the American economic system -documents that shape our political traditions, including the Declaration of Independence, the U.S. Constitution, the Bill of Rights and the Federalist Papers -functions of the three branches of government at the local, state, and national levels -Florida government, including the State constitution -municipal and county government -the evolving role of political parties and interest groups in determining government policy how rights and responsibilities of citizens in a democratic state have evolved and been interpreted contemporary political issues -career opportunities available in government services importance of civic participation in the democratic political process - role of women and diverse cultural groups in the development of our political system

Course Number: 2100320

Course Title: American History Honors

Credit: 1.0

The purpose of this course is to enable students to understand the development of the United States within the context of history with a major focus on the post-Reconstruction period. Students will use knowledge pertaining to history, geography, economics, political processes, religion, ethics, diverse cultures, and humanities to solve problems in academic, civic, social, and employment settings. The content should include, but not be limited to, the following: -review of U.S. History prior to 1880 -time-space relationships -significant events and trends in the development of United States culture and institutions -impact of expansion on the United States -origin of United States documents, ideals, and characteristics -the changing role of the U.S. Constitution -political, social, and economic conflicts and resolutions -technological and urban transformation of the United States -changes in lifestyles of United States citizens -changes in United States foreign policy from regional to global -cyclical characteristics of United States economic development -contemporary domestic and foreign issues that affect the United States

Course Number: 2102320

Course Title: Economics Honors

Credit: 0.5

Will meet graduation requirement for Economics

The purpose of this course is to provide students with the knowledge and decision-making tools necessary for understanding how society organizes its limited resources to satisfy its wants. Students will gain understanding of choices they must make as producers, consumers, investors, and taxpayers. The content should include, but not be limited to, the following: -economic reasoning -principles of decision-making in the marketplace -productive resources -scarcity and choices -opportunity costs and trade-offs -economic incentives -interdependence -contemporary and historical economic issues -personal economic skills -role of money -government and financial institutions -labor

Course Number: 2109320

Course Title: World History Honors

Credit: 1.0

The purpose of this course is to enable students to understand their connections to the development of civilizations by examining the past to prepare for their future as participating members of a global community. Students will use knowledge pertaining to history, geography, economics, political processes, religion, ethics, diverse cultures, and humanities to solve problems in academic, civic, social, and employment settings. The content should include, but not be limited to, the following: -time-space relationships -prehistory -rise of civilization -cultural universals -development of religion and the impact of religious thought -evolution of political systems and philosophies -interactions between science and society -

development of nationalism as a global phenomenon -origin and course of economic systems and philosophies - influence of significant historical figures and events - contemporary world affairs

AMH2010 American History: Discovery through Reconstruction (P) 3 credits

This course examines the political, economic, social, cultural, and intellectual development of the United States from the discovery of the Americas through Reconstruction. Prerequisite: Student must score into college-level English and reading on placement test.

AMH2020 American History: Reconstruction to the Present (P) 3 credits

This course examines the political, economic, social, cultural, and intellectual development of the United States from Reconstruction to the present. Prerequisite: Student must score into college-level English and reading on placement test.

POS1041 American Government (P) 3 credits

This course provides the basic principles of the U.S. Constitution, civil rights, political parties, and the electoral process. The structure and machinery of the federal government including the Congress, Presidency, and Judiciary are covered in detail. Prerequisite: Student must score into college-level English and reading on placement test.

ECO2013 Principles of Economics I (Macroeconomics) (P) 3 credits

This course examines the basic determinants of the business cycle through aggregate supply and aggregate demand analysis with special focus on the Great Depression. The definitions and determinants of the national measures of production, employment, income and price level (inflation) are covered. The evolution of macroeconomic theory is examined from the Great Depression and the ensuing Keynesian Revolution, to the current New Keynesian (Activists) and New Classical (Nonactivists) debate. The macro-stabilization tools of monetary and fiscal policy are introduced, and the application of those stabilization tools in a counter-cyclical manner to minimize periods of recession and inflation is given extensive treatment. The Federal budget deficit and its relationship to foreign exchange rates, the balance of trade, and the national debt is also presented and discussed. Prerequisite: Student must score into college-level English and reading on the placement test.

ECO2023 Principles of Economics II (Microeconomics) (P) 3 credits

This course provides the analytical framework for understanding how a market-directed, capitalistic economy allocates resources to answer the three fundamental questions of what, how, and for whom to produce with

minimum government intervention. The theory of price determination and the function of price are taught by employing the concepts of supply, demand and elasticity. The profit maximizing behavior of the firm under the market structures of pure, monopolistic and oligopolistic competition, and pure and natural monopoly is also examined. The principles underlying international trade and finance are presented and discussed. Other topics include the organization and functioning of resource markets, corporate finance, and market failure and public policy. Prerequisite: Student must score into college-level English and reading on the placement test.

Spanish

SPN1120 Elementary Spanish I (P)* 4 credits

This course facilitates the students' acquisition of communicative competencies in the four basic skills of speaking, listening, reading and writing Spanish. This course concurrently focuses on enriching students' cultural understanding of the Spanish-speaking world. Prerequisite/Corequisite: ENC 1101 or permission of instructor.

SPN1121 Elementary Spanish II (P)*4 credits

This course continues the students' acquisition of communicative competencies in the four basic skills of speaking listening, reading and writing Spanish begun in SPN 1120, with a continuing focus on enriching students' cultural understanding of the Spanish-speaking world. Prerequisite: SPN 1120 or permission of instructor.

Other

SPC1600 Introduction to Speech Communication (P) ** 3 credits

This course examines the nature and basic principles of speech, with emphasis on improving speaking and listening skills common to all forms of oral communication through a variety of experiences in public speaking. Prerequisite: Student must score into college-level English and reading on placement test.

SYG2000 Introduction to Sociology (P) 3 credits

This course is an introduction to the concepts, principles, perspectives, methods, and findings of sociology. The course seeks to integrate social reality and individual life experiences, with particular emphasis on contemporary American society. Prerequisite: Student must score into college-level English and reading on placement test.

SYG2010 Social Problems (P) 3 credits

This course examines the causes and proposed solutions of contemporary social problems: poverty, the economy, alienation, delinquency and crime, family changes, minority groups, war, health, aging, education, and population

growth. Prerequisite: Student must score into college-level English and reading on placement test.

PHI1103 Critical and Creative Thinking (P)*3 credits

This course is an introduction to logic, which stresses practice and application. The course provides practice in recognizing and avoiding inaccurate or fallacious thinking and promotes correct and creative thinking. Theory and theoretical principles are kept to a minimum. Student will demonstrate college-level writing skills through multiple assignments. Prerequisite: Student must score into college-level English and reading on placement test.

HUM 1533 Humanities: Philosophy (P)* 3 credits

This course examines traditional philosophical problems in ethics, social philosophy, political philosophy, epistemology, philosophy of mind, and philosophy of religion. It shows how these problems arise in business, medicine, government, education, psychology, art, historiography, social services, criminal justice, and religion. Student will demonstrate college-level writing skills through multiple assignments. Prerequisite: Student must score into college-level English and reading on placement test.

SLS 1101 Student Success (P) 3 credits

The course provides extensive instruction in study skills and strategies, helps students develop a positive attitude toward learning, and offers an orientation to the College

* Gordon Rule class-Must achieve a grade of "C" or higher for the A.A. Degree

- (P) = Professional Class
- (O) = Occupational Class

Career Technology Education

Business Technology Education

GEB1931 Introduction to Business Technology 3 credits

This course provides a historical perspective related to the role of technology associated with American business operations. The course emphasizes the technological advances made in a variety of business settings while specifically focusing on applications in accounting and financial services, office systems, management information systems, marketing, and retailing.

MAR2011 Principles of Marketing 3 credits

This course presents basic marketing concepts by focusing on the market mix, target marketing, primary marketing functions, and implementation of marketing strategies in a modern organization.

MKA1351 Business Seminar (O) 3 credits

This course is an introductory seminar which provides an opportunity to learn fundamental management and marketing concepts. Topics for each seminar rotate through a cycle and contribute to the student's understanding of the workplace.

MNA1821 Electronic Commerce (O) 3 credits

This course teaches the concepts, tools, and strategies for understanding and exploiting opportunities associated with electronic commerce. Topics cover online ordering, interacting with firms and governments, and how businesses are organized and compete in the global marketplace. This course develops a strategic understanding of the new electronic marketplace based on fundamental economics of the digital economy. Student must possess basic computer skills and knowledge of Internet.

SBM1000 Entrepreneurship (O) 3 credits

This course focuses on research and development of the various elements of a business plan, including financing, marketing, and bookkeeping

ADV2000 Advertising and Sales Promotion (O) 3 credits

This course presents basic advertising terminology and strategy. It focuses on target analysis, media analysis, ad development, scheduling, and budgets; resulting in the individual development of an advertising campaign

BCT1940 Professional Practice (O) 3 credits

This course provides a practical application of the skills and knowledge acquired in the classroom. Students report and present information about office and field tasks accomplished. A final report about time and material covered, and an analysis of the academic and real world experiences is required at the end of this course.

CGS1100 Introduction to Computer Applications for Business (P) 3 credits

This course introduces students to microcomputer applications for business. Major topics include windows operating systems, word processing, financial spreadsheets, database applications, e-mail, local area networks, and the Internet.

Computer Education

Course Number: 0200310

Course Title: Computer Applications I

Credit: 0.5

The purpose of this course is to enable students to develop knowledge and skills in the use of computer applications. The content should include, but not be limited to, the following: -input and output devices - principles, concepts, and processes of computer applications -ethical use of computers -

telecommunications concepts and use of the Internet

CGS1060 College Computing (P) 3 credits

This course teaches how to use a computer for academic purposes. Extensive study is made of Windows, a word processor, an electronic spreadsheet, and computer search techniques using a database application.

CGS1283 Networking Essentials (O) 3 credits

The purpose of this course is to prepare a student to learn and apply the basics of computer networking using common network devices. The course covers the OSI model and industry standards, network topologies, IP addressing including subnet masks, and basic network design. This is the first of a series of courses designed to prepare students for industry certification exams leading to the Cisco Certified Networking Associate or the Microsoft Certified Professional Systems Engineer.

CEN2527 CCNA2 Router Technology (O) 3 credits

This course teaches the basics of networking hardware covering beginning router configurations routed and routing protocols, and introduction to LAN switching. This is the second of a four-part series to prepare students for the Cisco Certified networking associate examination. Prerequisite: cgs1283.

CGS1822 Web Page Design with FrontPage (O) 3 credits

This course teaches Web page design using Microsoft FrontPage, including creating tables, forms, and frames. Other topics include an overview of DHTML, Java, JavaScript, and managing and publishing Web sites.

COP2000 Introduction to Computer Programming I (P) 3 credits

This course teaches beginning programming techniques necessary to write well documented, structured computer programs. The course emphasizes the planning process using examples involving sequence, decision, and iteration. Although the emphasis is on logic and algorithm development, programs are coded and implemented using a modern programming language. Recommended Prerequisite: MAT 1033.

CGS2878 Multimedia Programming (O) 3 credits

This course teaches the concepts and skills of using Macromedia Director to create movies and multimedia productions for DVD, Kiosks, CD-ROM or the Web. The fundamentals of lingo scripting language are taught to create highly visual, animated and interactive movies for the Web or for DVD/CD distribution.

CTS 1104 Windows Professional (P) 3 credits

This course teaches how to operate in the Microsoft Windows Professional environment. It covers such topics as installation, configuration, and administration of the

Microsoft Windows Professional operating system in a networked environment.

CTS 1814 Windows Server (O) 3 credits

This course teaches Microsoft Windows Server. It covers such topics as installation, configuration, and administration of the Microsoft Windows Server operating system in a networked environment. Recommended prerequisite: CTS 1104.

CGS1522 Presentation Graphics (O) 3 credits

This course teaches how to design and develop PowerPoint presentations and to prepare students to take the specialist-level examination for Microsoft Office PowerPoint. Before taking this class, the student needs to know how to open, edit and save word processing documents; open and navigate an internet browser; perform basic disk and file management skills.

CET 1178 A+ Certification Training I (O) 3 credits

This course prepares the student for a career in the personal computer industry. It also helps prepare the student for the A+ Certification examination, which measures the competencies required by a service technician with six months of on-the-job experience. Students learn how to install, configure, upgrade, troubleshoot, and repair microcomputer hardware.

CET 1179 A+ Certification Training II (O) 3 credits

This course is a continuation of A+ Certification Training I.

CET 1588 Network + Certification (O) 4 credits

This course teaches a wide range of vendor-neutral networking technologies and skills such as configuring, installing, troubleshooting and maintaining network interface cards, hubs, routers, switches, servers, RAID technologies and clustering technologies. The course focuses on necessary management skills including managing a support/help desk center, supporting end users, and working in conjunction with management and other technicians. Additional topics include developing a documentation system and Standard Operating Procedures (SOP). This course prepares the student for the CompTia Network + Industry Certification Exam. Recommended Prerequisite: CET 1178.

COP1332 Visual Basic.NET (O) 3 credits

This course teaches Microsoft Visual Basic.NET for Windows at an introductory level. Students learn to create applications which operate in a Microsoft Windows environment using Visual Basic.NET. Topics include, but are not limited to, creating a windows application, designing and creating forms, using menus, common dialog boxes, procedures, functions, arrays, decision statements and loops. Prerequisite: COP 2000 or permission of instructor.

Digital Design/ Drafting

ETD1321 Introduction to AutoCAD (O) 3 credits

This course provides instruction on AutoCAD software. Start-up procedures and menu applications used for construction of a graphic display and extensive hands-on experience on AutoCAD software is provided.

ETD 1812 QuarkXPress (O) 3 credits

This course introduces students to the QuarkXpress layout and design software used in the graphics design industry. The course consists of a series of lessons covering the tools and functions of this program. QuarkXpress is an integrated publishing package used to combine text pictures, typography, writing, editing, and printing in one application.

ETD 1815 Adobe Photoshop (O) 3 credits

This course teaches the fundamentals of image-editing tools for professional designers who want to produce sophisticated graphics for print and the web using Adobe Photoshop. Photo retouching, image editing, and color painting will be among the topics covered.

ETD2818 Adobe Photoshop II (O) 3 credits

This course teaches advanced features of the Adobe Photoshop application. Tools and techniques to create, edit and enhance digital images for desktop or Web publication are covered. Operation and troubleshooting of digital equipment, cameras printers and scanners are also part of this course Prerequisite: ETD 1815.

ETD 1817 Adobe Illustrator (O) 3 credits

This course teaches the design and composition of illustrative artwork for print publishing and multi-media graphics using Adobe Illustrator. The course consists of a series of lessons, covering the tools and functions of this software

ETD 2819 Adobe Illustrator II (O) 3 credits

This course teaches ways to create imagery from various sources. Techniques are covered to enhance or alter existing images for the new visuals. New ways of approaching problem solving are outlined in clear step-by-step fashion. special effects, once the domain of high -end systems, are put into practical application. This course is for anyone interested in taking Illustrator beyond the introductory levels for print, web, and other multimedia.

ETD 2320 AutoCAD Level II (O) 3 credits

This course develops an understanding of the intermediate AutoCAD commands and concepts. Emphasis will be on implementing productivity into the design process through various drawing, editing, and display techniques. Prerequisite: ETD 1321.

ETD 2377 3-D Digital Animation I (O) 3 credits

This course introduces students to the use of 3-D Studio for still image renderings and 3-D animations. Topics include a description of the 3-D Studio Interface and features used to create geometry, render still images, and animated scenes. The primary functions of all five modules in 3-D Studio will be presented. Prerequisite: ETD 1321.

ETD 2378C 3-D Digital Animation II (O) 3 credits

This course is an advanced course in 3-D studio rendering and animation software. The course will build upon skills learned in Level I. These include complex detailed modeling, editing models at the vertex and face levels, in-depth exploration of the Loft function development of complex materials, multiple path control in the keyframer, and video post function. Prerequisite: ETD 2377.

ETD 2816C Digital Video Post Production (O) 3 credits

This course introduces students to the world of digital movie-making. Students learn how to create, record, and play movies from video, sound, animations, photographs, drawings, text, and other materials. Prerequisite: ETD 1810C or ETD 1815.

EGS1001 Introduction to Engineering (O) 3 credits

This course is an introductory course to the engineering and technology professions with emphasis on the spectrum of work opportunities and careers. The student is introduced to engineering work habits, responsibilities, communication, problem solving techniques and technical calculations. The various engineering specialties will be represented through appropriate presentations to be made by working professionals in the local engineering and technical community.

EGS1110 Engineering Graphics 3 credits

This course presents basic graphical communications including the use of instruments, lettering, scales including metrics, engineering geometry, orthographic projection, sections, pictorials, dimensioning and tolerancing, and working drawings.

ETD 1321 Introduction to AutoCAD (O) 3 credits

This course provides instruction on AutoCAD software. Start-up procedures and menu applications used for construction of a graphic display and extensive hands-on experience on AutoCAD software is provided

ETD 1812 QuarkXpress (O) 3 credits

This course introduces students to the QuarkXpress layout and design software used in the graphics design industry. The course consists of a series of lessons covering the tools and functions of this program. QuarkXpress is an integrated publishing package used to combine text pictures, typography, writing, editing, and printing in one application.

ETD 1815 Adobe Photoshop (O) 3 credits

This course teaches the fundamentals of image-editing tools for professional designers who want to produce sophisticated graphics for print and the web using Adobe Photoshop. Photo retouching, image editing, and color painting will be among the topics covered.

ETD 1817 Adobe Illustrator (O) 3 credits

This course teaches the design and composition of illustrative artwork for print publishing and multi-media graphics using Adobe Illustrator. The course consists of a series of lessons, covering the tools and functions of this software

ETD 2320 AutoCAD Level II (O) 3 credits

This course develops an understanding of the intermediate AutoCAD commands and concepts. Emphasis will be on implementing productivity into the design process through various drawing, editing, and display techniques. Prerequisite: ETD 1321.

ETD 2377 3-D Digital Animation I (O) 3 credits

This course introduces students to the use of 3-D Studio for still image renderings and 3-D animations. Topics include a description of the 3-D Studio Interface and features used to create geometry, render still images, and animated scenes. The primary functions of all five modules in 3-D Studio will be presented. Prerequisite: ETD 1321.

ETD 2816C Digital Video Post Production (O) 3 credits

This course introduces students to the world of digital movie-making. Students learn how to create, record, and play movies from video, sound, animations, photographs, drawings, text, and other materials. Prerequisite: ETD 1810C or ETD 1815.

ETI 1091 Introduction to Emerging Technologies (O) 3 credits

This course teaches how to use effectively emerging technologies for learning and the contemporary workplace. The course explores the use of wireless technologies, electronic portfolios, e-books, communications software, web-based instruction, blended learning environments, voice-over IP technology, voice recognition software, SmartBoards, collaboration tools, virtual spaces, and other relevant technologies.

EVS 2191 Environmental Sampling and Analysis (O) 3 credits

This course teaches the proper methods of collecting, transporting, and analyzing samples of air, water, wastewater, soil, and other materials. The course stresses techniques for data analysis and presentations. Teaching methods include a combination of lectures, lab, and field components related to the sampling of air, water, soil, and other materials. Prerequisite: CHM 1020.

GIS 1060 GIS with ArcView (O) 3 credits

This course focuses on definition, practical implementation, and the uses of Geographic Information Systems (GIS) by utilizing ESRI's (Environmental Systems Research Institute) ArcView software. The schedule offers awareness by viewing, analyzing, and producing maps based on various GIS spatial and database sets.

GRA2161 2-D Digital Animation (O) 3 credits

This course teaches the Adobe After Effects software as graphics animation software. Covering the creation of motion graphics, this course provides the core 2-D and 3-D tools for compositing, animation, and effects that motion-graphics professionals, web designers, and video professionals need. Fundamentals in the design of composited layers are combined with sophisticated visuals and audio effects for the animation. Students are also introduced to the use of assets created in object-oriented and digital imagery software such as Adobe PhotoShop, Illustrator, Premiere and AutoCAD. Prerequisite: ETD 1815, ETD 1817.

GRA2713 Digital Video Production I (O) 3 credits

This course teaches the concise workflow of a Digital Video Production. Foundations for understanding the practical techniques, specialized language, and the dynamic nature of motion graphic aesthetics are developed. This course is designed for students and video enthusiasts interested in presenting video media within today's emerging formats. Prerequisite: ETD 1815.

GRA2160 Adobe Animation I – Live Motion (O) 3 credits

This course teaches Adobe LiveMotion and GoLive as graphics animation software. Covering the creation of motion graphics, this course combines digital assets for the posting of presentational images in multimedia projects and the Internet. Fundamentals in the design of animated graphics with sound in addition to editing techniques in object oriented and digital imagery software's like Adobe PhotoShop, Illustrator, and AutoCAD 2000i are seamlessly integrated into single interactive compositions. Prerequisite: ETD 1815, ETD 1817.

SUR1101 Basic Surveying and Mapping (O) 3 credits

This course includes field surveying measurements techniques, taping corrections, angles by repetition, differential leveling, note reduction, instrument adjustments, traverse closure and area computations.

Medical Skills Education**HIM1999 Introduction to Health Professions (O) 3 credits**

This course teaches the health care delivery system, roles of the health team members, and basic skills necessary for success in a health career.

HSC1802 Health Science Seminar & Supervised Work Experience (O) 3 credits

This course teaches the applied concepts introduced in the classroom components of students on a healthcare track through mentoring, job shadowing, and work experience. The course provides the student with an opportunity to shadow licensed and certified healthcare professionals and practice a variety of skills necessary in a health related field. Personal and professional characteristics for success in a healthcare setting, critical thinking skills, communication within an organization, and patient interaction and communication are addressed. The course includes an individual student project designed to link the classroom with the workplace

DIE2201 Nutrition and Diet Therapy 3 credits

This course is an introductory course in the science of nutrition and principles of diet therapy. Fundamental principles of nutrition are studied and application of these principles to diet planning is covered

PSY 2012 Introduction to Psychology (P) 3 credits

This course provides an introduction to the scientific study of human behavior and mental processes by surveying the different subfields of psychology. Topics include the brain, memory, personality, abnormal behavior, and cognition. Prerequisite: Student must score into college-level English and reading on placement test.

DEP2004 Human Development (P) 3 credits

This course develops knowledge of the biological, psychological, and social development stages of the human being from conception to death, including their relationship to education. Prerequisite/corequisite: ENC 1101. Prerequisite: Student must score into college-level English and reading on placement test.

Major Areas of Interest

MAI's have been instituted by the state to:

- Make school interesting and engaging for today's students
- Make school relevant for their life/career choices
- Give student's opportunities to explore new things
- Give teachers a chance to share/mentor students who have similar interests
- Keep Florida's children in school!

To complete a MAI, students must select four (4) credits in an area of interest. For example, courses may be in:

- a career and technical program
- fine and performing arts, or
- an academic content area

Students may revise major areas of interest each year as part of the annual course registration process and should update their education plans to reflect such revisions

Major Areas of Interest available at the Clark Advanced Learning Center:

- Associate of Arts Degree
- Health Science
- Business/Technology
- Computer Education
- Digital Arts