



Lower Cape May Regional
High School

Course Description Book

POLICY

The Lower Cape May Regional Board of Education is cognizant of the need to implement Title VI of the Civil Rights Act of 1964, the Federal Department Regulations (45CFR part 80), Title IX of the Education Amendments of 1972, Title VI New Jersey Administrative Code, and Section 504 of the Rehabilitation Act of 1974.

The Lower Cape May Regional Board of Education affirms its responsibility to ensure all students in the public schools of Lower Cape May Regional School District equal educational opportunity and all employees equal employment opportunity regardless of race, color, creed, religion, sex, ancestry, national origin, social or economic status, and handicap.

Dear Parent/Guardian,

This Program of Studies and Course Description Booklet has been prepared to provide students and parents with a guide that will assist them in the selection of a suitable academic program which best meets the needs, interests and abilities of each student.

The importance of proper course selection cannot be over emphasized. It requires meeting the established criteria and the cooperative effort of the student, parents, and the school staff. The Guidance Department is available to meet with parents as plans are made for the selection of each student's academic program. We extend an invitation to you to visit us in order to discuss your son or daughter's plans. Appointments with Guidance Counselors may be made by calling the Guidance Office at 884-3475 (Ext. 240).

Any exceptions to the recommended course sequence, 9th grade placement criteria, or any other policy contained in this booklet, must have the written approval of the High School Principal.

GUIDANCE STAFF

Ms. Heather Donohue, Mrs. Dana Markovitz, Ms. Angela Mannello

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GENERAL INFORMATION

GRADUATION REQUIREMENTS

Content Area	Credits and additional requirements
English Language Arts	20 credits
Mathematics	<p style="text-align: center;">15 credits including:</p> <ul style="list-style-type: none"> • Algebra I or the content equivalent² • Geometry or the content equivalent² • Third year of math that builds on the concepts and skills of algebra and geometry and prepares students for college and 21st century careers
Science	<p style="text-align: center;">15 credits with at least 5 credits in each:</p> <ul style="list-style-type: none"> • Laboratory biology/life science or the content equivalent • Laboratory/inquiry-based science course (i.e., chemistry, environmental science, or physics) • Laboratory/inquiry-based science course
Social Studies	<p style="text-align: center;">15 credits including:</p> <ul style="list-style-type: none"> • 5 credits in world history • Integration of civics, economics, geography and global content in all course offerings • N.J.S.A. 18A:35-1 and 18A:35-2
Financial, Economic Business, and Entrepreneurial Business Literacy	2.5 credits
Health, Safety, and Physical Education	<p style="text-align: center;">15 credits over four years including:</p> <ul style="list-style-type: none"> • 3 ¾ credits in health, safety, and physical education during each year of enrollment, distributed as 150 minutes per week each year • N.J.S.A. 18A:35-5, 18A:35-7 and 18A:35-8
Visual and Performing Arts	5 credits
World Languages	5 credits
Technology	Integrated throughout all courses
21st Century Life and Careers	5 credits

A student must select a minimum of 4 major courses per year from the following areas:

English	Science
Foreign Language	Mathematics
Business/Technology	Social Studies

The remaining periods may be filled by any combination of electives or academic subjects. Students are encouraged to schedule additional elective courses. All students should schedule thirty (30) credits per year.

One hundred twenty (120) credits are required for graduation.

ACADEMIC ELIGIBILITY POLICY

The term used to identify an individual on one of our sports teams is a “STUDENT-ATHLETE”. It is not a coincidence that the word “Student” is first. We expect our athletes to be students first. We expect our athletes to get passing grades. The following is the Academic Policy of the Lower Cape May Regional School District:

1. All first semester 9th grade students are eligible for participation in September.
2. For participation in September, all 10th, 11th, and 12th grade students must have passed 6 subjects (30 credits) from the previous year. According to NJSIAA regulations students not passing 6 subjects are ineligible until the second semester.
3. At the end of the first marking period all students in all grades must be passing 6 subjects. Those not passing 6 will be ineligible until they bring all grades up to passing.
4. At the end of the second marking period all students in all grades must be passing 6 subjects. Those not passing 6 subjects (30 credits) will be ineligible until they bring all grades up to passing. At the end of the second marking period, students not passing 6 subjects (30 credits) are, according to NJSIAA regulations, ineligible until September 1st (based on first semester average).
5. At the end of the third marking period all students in all grades must be passing 6 subjects. Those not passing 6 will be ineligible until they bring all grades up to passing.
6. Students regaining eligibility must maintain a passing grade throughout the marking period or they will forfeit their eligibility. It will be the responsibility of the coach, Athletic Director, and teacher to monitor the students’ progress at mid-semester.

ELIGIBILITY REQUIREMENTS FOR THE CAPE MAY CHAPTER OF THE NATIONAL HONOR SOCIETY

The eligibility requirements to the National Honor Society are as follows:

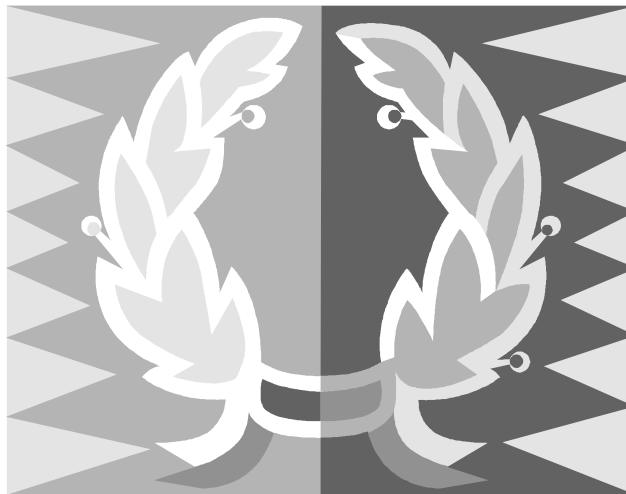
- * 11th and 12th grade students in good standing
- * Must have enrolled in a minimum of four college bound, honors, or advanced placement courses in each of the major academic areas: Math, Science, English, and Social Studies for grades 9-11.
- * Students who take Algebra IA their freshman year may be admitted into the Cape May Chapter of National Honor Society in their senior year if they successfully complete Algebra I and Geometry as well as enroll in and complete Algebra II during their senior year providing they meet all other requirements.
- * 11th and 12th grade students must have a minimum grade point average of 3.66. Grade point averages are not rounded up.

Students must complete a minimum of 10 community service hours each school year for grades 9-12, or a total of 20 hours prior to their junior year and a total of 40 hours by the end of their senior year.

Students must maintain the above-mentioned standards throughout the tenure of the membership to the National Honor Society.

NHS members in their senior year must maintain the required GPA standard, the minimum of four (4) college-bound courses in the 12th grade.

The eligibility requirements are in compliance with the national and local by-laws of the National Honor Society and have been approved by the high school principal and the members of the Lower Cape May Regional Board of Education.



ATTENTION!! **COLLEGE-BOUND SENIORS**

Although colleges look at many areas of a student's credentials, one of the most important considerations is the high school transcript. A strong schedule in the senior year is an asset and will enhance the college application. Each college-bound senior must schedule a minimum of four (4) major courses during the senior year. It is strongly recommended that each college-bound senior include at least one course in Math during the senior year.

College-bound students should have completed a minimum of 16 academic units upon completion of their senior year. The academic units completed should be in the following areas.

College-Bound English	4 units
Mathematics	3 units
Foreign Language	2 units
Sciences (including laboratory sciences)	3 units
Social Studies	3 units
Electives	2 units



Admission to New Jersey State colleges and to most private colleges will, in part, be determined by the number of academic units students present. Student transcripts must show 16 academic units of course work. Class Rank, S.A.T. Scores, student activities, and counselor or teacher recommendations are also determining factors in the college admissions process.

OFFERING OF A COURSE

The offering of a course and the number of sections is based on the number of students who sign up for that course. If an insufficient number of students sign up, that course may not be offered. The final decision on course offerings and number of sections will be determined by the administration.

HONORS / AP PROGRAM

Lower Cape May Regional High School offers an Honors program for academically gifted and highly motivated students. Classes in the Honors program provide students with a challenging, in-depth study of content at a pace appropriate to this type of learner. Honors courses are offered primarily during the 9th and 10th grades in Math, Science, English and Social Studies. During the junior and senior years of high school, students who demonstrate success in the Honors program may enroll in the Advanced Placement program. These courses also provide a rigorous curriculum while preparing students for the Advanced Placement test in that subject. Students who achieve passing grades in the Advanced Placement (AP) test may earn college credits for that course. Placement criteria in the Honors program requires incoming freshmen to have an "A" average in their 8th grade courses, a score of "Advanced" in the New Jersey State Assessments (PARCC), teacher recommendations, and parent approval. Entrance into the AP program requires a B+ average in the previous year's prerequisite Honors course, teacher recommendation, and parent approval.

HONORS / AP COURSE OFFERINGS

9th Grade

9th Grade Honors English
 Honors World Cultures
 Honors Biology
 Honors Geometry
 Introduction to Engineering
 AP Computer Science Principles
 Principles of Biomedical

11th Grade

11th Grade AP English
 AP U.S. History
 AP Biology
 Honors Pre-Calculus
 Honors Spanish IV
 Digital Electronics
 Honors French IV
 AP Computer Science A
 AP Seminar I
 Medical Interventions

10th Grade

Honors English
 Pre-AP U.S. History I
 Honors Chemistry
 Honors Algebra II
 Honors Spanish III
 Honors French III
 Principles of Engineering
 AP Computer Science Principles
 AP Computer Science A
 Human Body Systems

12th Grade

12th Grade AP English
 AP Physics
 AP Calculus (AB and BC)
 AP U.S. Government and Politics
 Honors French IV
 AP Spanish
 Civil Engineering
 AP Psychology
 AP Seminar II
 AP Art Studio
 AP Statistics
 Environmental Sustainability

SEQUENCE OF COLLEGE BOUND PROGRAM OFFERINGS

SUBJECT	GRADE 9	GRADE 10	GRADE 11	GRADE 12
MATH	Algebra I Algebra Block Honors Geometry	Geometry Algebra II Honors Algebra II Intro to Algebra II	Geometry Algebra II or Intro Alg II Pre-Calculus AP Pre-Calculus	Statistics/ AP Statistics AP Pre-Calculus Calculus AP Calculus
SCIENCE	CB Biology Honors Biology	CB Biology CB Chemistry Honors Chemistry Environmental Science	CB/Honors/AP Chemistry Environmental Science, Marine Biology, AP Biology, Physics, AP Physics	AP Chemistry Marine Biology AP Physics
SOCIAL STUDIES	Honors World Cultures CB World Cultures	CB U.S. History I Honors History I (PreAP)	CB U.S. History II AP History II	AP U.S. Government AP Psychology Human Conscience/Minorities in America
ENGLISH	CB 9 th English Honors 9 th English	CB 10 th English Honors 10 th English	CB 11 th English AP English Language	CB 12 th English AP English Literature
FOREIGN LANGUAGE	Spanish I or French I Spanish II	Spanish II or French II Spanish III or Honors Spanish III	Spanish III French III/Honors French III Spanish IV /Honors Span IV	AP Spanish French IV/Honors
PE / HEALTH	PE / Health 9	PE / Health 10 Driver Education	PE / Health 11	PE / Health 12

Electives should be chosen based on the students' anticipated college field and/or job goals.

PROCEDURES FOR STUDENTS DROPPING COURSES GRADES 9 – 12

- Students who attend class regularly, turn in all required work, and seek extra help when needed will increase their likelihood of achieving academic success. If students experience serious academic difficulties and/or have failing grades, a parent/student/teacher conference is recommended. **Students who follow these steps yet continue to experience consistent academic failure may submit a written request for a first marking period schedule change.**
- Students may not add a course after the third week of the semester. After the third week of school any schedule changes must be approved by the Principal. If there are special circumstances such as new or transfer students or graduating seniors, the Principal may approve an addition after this time.
- Students who drop a course after the third week of the semester will have a WF (withdrawal failure) or WP (withdrawal passing) appear on their permanent transcript.



COURSE WEIGHTING

Class Rank is calculated on a weighted system. There are three levels of course weighting. All courses offered in high school have been designated a level in rank computation.

GRADE WEIGHTING TABLE

GRADE	LEVEL 1	LEVEL 2 CB	LEVEL 3 AP
A+	4.33	4.66	5.33
A	4.00	4.33	5.00
A-	3.66	4.00	4.66
B+	3.33	3.66	4.33
B	3.00	3.33	4.00
B-	2.66	3.00	3.66 *
C+	2.33	2.66	3.33
C	2.00	2.33	3.00
C-	1.66	2.00	2.66
D+	1.33	1.66	
D	1.00	1.33	
D-	.66	1.00	
F	0.00	0.00	
I	0.00	0.00	
NC	0.00	0.00	
NG	0.00	0.00	

*Any grade lower than a B-, student should be re-evaluated for placement in a college-bound course.

HONOR ROLL

First Honors One B and the rest A's
 Second Honors One C and the rest A's and B's

$$\text{GPA} = \frac{\text{grade point equivalent} \times \text{credit}}{\text{credits attempted}}$$

NOTE: Students must be enrolled at Lower Cape May Regional High School for a minimum of four semesters to be included in their class ranking. Students who transfer into LCMRHS after Sept. 1 of their Junior year will not be included in the class rank.

120 REQUIRED CREDITS

20 ENGLISH

15 MATH

15 SCIENCE

15 SOCIAL STUDIES

5 WORLD LANGUAGE

5 PERFORMING ART AND/OR
VISUAL ART

15 PE/HEALTH

5 CREDITS OF 21ST CENTURY LIFE AND
CAREERS OR CAREER TECHNICAL
EDUCATION

2.5 FINANCIAL LITERACY

PRE-COLLEGE OPPORTUNITIES

Lower Cape May Regional High School offers dual, articulated, and concurrent credit opportunities with a variety of colleges including: Stockton University, Rowan University, Middlesex County College, The New England Institute of Technology, Rochester Institute of Technology, The Art Institute of Philadelphia, Cumberland County College, Atlantic Cape Community College, and The Restaurant School at Walnut Hill. These agreements provide students enrolled in specific courses the opportunity to obtain college credit at a reduced cost or potentially free of charge.



Keep an eye out for this: owl symbol located throughout the course book as a quick indication of a college credit opportunity.

In order to participate in this program, the student must:

- Be enrolled in an eligible course and meet the college/university grading expectations. (Grading expectations vary)
- Complete an application and register with the college/university at the start of the course
- Remit tuition for the course to the college/university in advance (dual and concurrent courses only)
- Upon successful completion of the course, the student must request an official transcript from the college/university.

Articulated courses do not require advanced payment and may only be realized if/when a student decides to attend the associated college. Students should discuss with their teacher the articulation agreement as it may vary from course to course. Dual and concurrent courses require advanced payment but elicit transcript credits that are transferable to all New Jersey colleges and many out-of-state colleges as well. Dual and articulated courses are taught by faculty at Lower Cape May Regional High School. Concurrent courses are taught by college staff. Course offerings are reviewed and updated annually. Credit cost varies per institution.

LCMR Course	ACCC Course	Dual Credits
Pre AP US History	HIST 103 US History I	3
Honors Algebra II	MATH122 College Algebra	4
Honors Spanish III	SPAN111 Elementary Spanish I	3
Honors Spanish IV	SPAN112 Elementary Spanish II	3
AP Pre-Calculus	MATH150 Pre-Calculus	4
Honors Chemistry	CHEM100 Intro to College Chemistry	4
Cybersecurity	CISM176 Systems Security Methods	3
Computer Science A	CISM154 Computer Programming	4
Principles of Biomedical and Human Body Systems	BIOL118 The Human Body	4
TV Digital Video Prod. I	TVRF103 Digital Video Production	3
Advanced Dance	DANC170 Introduction to Dance	3
Music History/Music Theory	MUSC100 Music Appreciation	3
Acting/Stagecraft	THEA111 Acting I	3
Desktop Publishing/Graphic Design	ARTS135 Art with Computers	3
Statistics	MATH220 Statistical Methods	4
Intro to Business	BUSN101 Introduction to Business	3
Intro to Psychology	PSYC101 Introduction to Psychology	3
Entrepreneurship	BUSN104 Entrepreneurship	3
Honors French III	FREN111 Elementary French I	3

Honors French IV	FREN112 Elementary French II	3
Art II	ARTS115 Intro to Visual Arts	3
Public Speaking	COMM120 Public Speaking	3
Law and Public Safety II	CRIM170 Concepts of Terrorism	3
Drones	AVIT140 sUAS OperationMultiRotor	3
LCMR Course	ACCC Course Articulated Credit- 3 credits each	
Law Enforcement and Public Safety I	CRIM101 Intro to Criminal Justice	3
Law Enforcement and Public Safety III	CRIM203 Criminal Investigation	3
Intro to Culinary Arts, Culinary Arts II, and Advanced Culinary Arts	CULN101 Intro to Culinary Arts	3
LCMR Concurrent Course	ACCC Course Concurrent Credit- 3 credits each	
English Composition 101	ENG101 Composition I	3
English Composition 102	ENG102 Composition II	3
Macroeconomics	ECON 110Macroeconomics	3
Psychology 101	PSYC101 Principles of Sociology	3

Concurrent courses are available after school hours and online, pending student interest.

LCMR Course	Rochester Institute of Technology Course	*Articulated Credits
Introduction to Engineering Design	PLTW 101 Intro to Engineering Design	3
Principles of Engineering	PLTW 102 Principles of Engineering	3
Digital Electronics	PLTW 103 Digital Electronics	3
Civil Engineering and Architecture	PLTW 104 Principles of Civil Engineering Technology	3
Principles of Biomedical Science	PLTW-111 Princ. of Biomedical	3
Human Body Systems	PLTW-112 Human Body Systems	3
Medical Interventions	PLTW- 113 Medical Interventions	3

*Students have the option to purchase transcript credit which may be transferrable

LCMR Course	New England Institute of Technology Course	Articulated Credits
Computer Science Principles	SE 126 Intermediate Programming Python	4
Cybersecurity	NE115- Computer and Networking Fundamentals	3
Human Body Systems	Anatomy and Physiology I and BIO 101 Lab	6

LCMR Course	Stockton University	Dual Credits
Human Conscience/Minorities in America	Holocaust Genocide Crimes Against Humanity GSS 1232	4
Environmental Science	Intro to Environmental Science	4
Desktop Publishing/Graphic Design	Computer as an Art Tool- ARTV1125	4
Spanish III	Spanish I- LANG 1240	4

Spanish IV	Spanish I- LANG 1240	4
Acting/Stagecraft	Intro to Acting GAH 2246	4
Future Educators	Pathways to Learning GSS2342	4
Esports	Intro to Esports HTMS2132	4
TV Video Production I	TV Production- COMM 2403	4
AP Calculus	MATH2215 Calculus I	4
AP History	US History 1865-1921 HIST 2162	4
Marine Biology/Oceanography	MARS1300 Intro to Oceanography	4
Pre-Calculus	MATH 1100 Precalculus Math	4
US History I	HIST1152 Intro to US History to 1865	4
US History II	HIST 1153 Intro to US History Since 1865	4

Stockton University dual credits are FREE for free/reduced lunch students.

LCMR Course	The Art Institute of Philadelphia	Articulated Credits
Advanced Culinary Arts	CUL10111 Application and Use *Note Must have current ServSafe Certificate CUL10121 Culinary Skills 1 CUL10240 Culinary Skills 2	9

LCMR Course	The Restaurant School at Walnut Hill College	Articulated Credits
Advanced Culinary Arts	ServSafe Certificate	1.5

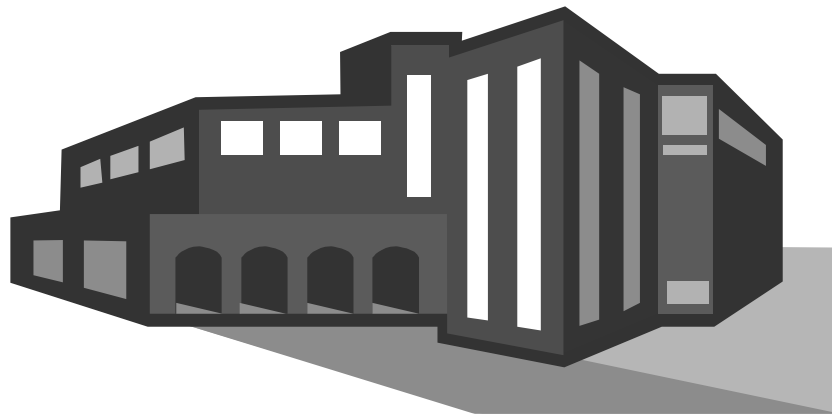
In conjunction with Atlantic Cape Community College (ACCC), LCMR offers a Pre-College Program. The Pre-College Program supports the national initiative and state call for the promotion of increased cooperation between secondary schools and institutions of higher education. The national Early College High School initiative encourages educational partnerships to increase the access of motivated high school students to the educational resources of institutions of higher education, earning dual credits, Associate Degrees and career certifications by the end of 12th grade. Therefore, the Pre-College Program offered at LCMR will become the official Associate Degree pathway earned at ACCC. In general, an Associate's degree represents 60 credits of a prescribed program of coursework. Through the dual, articulated, and Advanced Placement program(s), a student can accrue up to 30 credits of the required 60 credits for the Associate degree at LCMR. The remaining 30 credits must be taken as concurrent courses or through ACCC. All/most college courses taken at ACCC will count towards LCMR graduation requirements as well. Student/families need to plan their pathway with both their LCMR counselor and counselors at ACCC. All tuition and fees are paid for by the student/families. Through the financial aid office at ACCC, there may be grant/aid and scholarship opportunities. Ask your guidance counselor and/or the college/career counselor for more details about the Pre-College Program / Dual Diploma at LCMR.

ACADEMIES AT LOWER CAPE MAY REGIONAL HIGH SCHOOL

Lower Cape May Regional is developing academic/career academies to allow students to concentrate their studies toward a specific theme. The courses listed in each academy represent a required “core” of electives. Students are encouraged to select additional electives in their areas of interest.

Students enrolled in an academy will complete a sequenced course of study and an end-of-program test that will earn them a designation on their high school transcript and diploma. Several of our academies offer articulation agreements which provide college credit, at a reduced fee, for successful completion of advanced level academy courses. Each course in these Career & Technical Education Programs prepares students to acquire Industry Certifications and offers Work-Based Learning opportunities.

The course of study for each academy is described on the next few pages. Students interested in enrolling in an academy should consult with their guidance counselor.



ACADEMY OF BUSINESS

Entrepreneurship Program

Introduction to Business*

Marketing

Entrepreneurship*

Accounting
(Optional)

*Introduction to Business and Entrepreneurship offer dual credit at Atlantic Cape Community College.

ACADEMY OF HUMAN SERVICES

Sociology

Future Educators

AP Seminar I & II



ACADEMY OF LAW ENFORCEMENT & PUBLIC SAFETY

Introduction to Criminal Justice*

Terrorism & Homeland Security*

Forensics & Criminal Investigations*

*Introduction to Criminal Justice, Terrorism & Homeland Security, and Forensics/Criminal Investigations courses offer college credit at Atlantic Cape Community College.

Students taking this sequence have an opportunity to attend Police Academy training and receive Class I Police Officer Certification.

ACADEMY OF ENGINEERING

Engineering Program of Study

Introduction to Engineering and Design

Principles of Engineering

Civil Engineering & Architecture

Digital Electronics

Environmental Sustainability



Students successfully completing these courses in the sequence and who pass the End of Course exams can receive college credits from Rochester Institute of Technology and Rowan University. (Note- Environmental Sustainability is the only course that is currently not a dual credit option.)

ACADEMY OF CULINARY ARTS

Culinary Arts Program

Introduction to Culinary Arts

Culinary Arts II (Full year)

Culinary Arts III

**Internship in the
Culinary Arts**

Culinary Arts IV

Students completing the Culinary Arts sequence of courses can earn college credit through Atlantic Cape Community College and Walnut Hill College.

Each course in these Career & Technical Education Programs prepares students to acquire Industry Certifications.

After school, concurrent college course options for the Culinary Program are also available pending student interest.

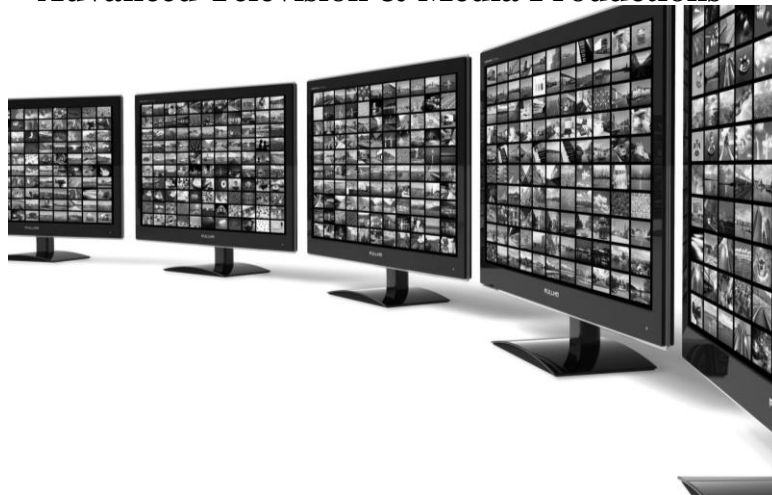
ACADEMY OF TELEVISION & BROADCASTING

Introduction to Television & Media Productions*

(1/2 year)

Intermediate Television & Media Productions

Advanced Television & Media Productions



ACADEMY OF COMPUTER SCIENCE

Introduction to Engineering Design
(Recommended)

AP Computer Science Principles

AP Computer Science A

Cyber Security



BIOMEDICAL SCIENCE

|

Principles of Biomedical Science

|

Human Body Systems

|

Medical Interventions

|

Biomedical Innovation



ART DEPARTMENT – COURSE DESCRIPTIONS

INTRO TO DRAWING & PAINTING (Grades 9-12)

Course Code #002

2.5 Credits

This is an introductory art course that will explore several techniques and time periods throughout art history. The focus will primarily be on developing drawing and basic painting skills for the student with an interest in the arts. Artists such as Pablo Picasso, Georges Seurat, and Henri Matisse will be studied in depth with an emphasis on learning-specific art movements that accompany each artist. Students will be provided an opportunity to create both original artworks based on specific styles of art and a famous artist reproduction. Suggested Sequel: Intro to 3-D Design and Mixed Media or Art II

INTRO TO 3-D DESIGN & MIXED MEDIA (Grades 9-10)

Course Code #003

2.5 Credits

This is an introductory half-year art course that will explore several techniques and time periods throughout art history. The focus will primarily be on developing techniques in 3-D design as well as exploring a variety of media available in the arts. Art History will focus on ancient Greek Pottery, Aboriginal Art and individual artists such as Georgia O'Keeffe and Paul Gauguin. This is an ideal beginning course for the student with an interest in the arts and will provide hands on activities. Students will be provided an opportunity to create both original artworks based on specific styles of art and a famous artist reproduction.

Suggested Sequel: Intro to Drawing and Painting

FINE ARTS II (Grades 10-12)

Course Code #006

5 Credits



Prerequisite: Intro to Drawing and Painting with a grade of C or better

Art II is designed to deepen aesthetic understandings, to raise levels of achievement by increasing powers of self-expression and by acquiring technical skills, to further associate art with the total experience of life. Originality and creativity continue to be of prime importance. Increased competence as an outgrowth of familiarity with many media and subject matter is sought at this level. There is added emphasis on technical skill. Sequel: FINE ARTS III

FINE ARTS III (Grades 11-12)

Course Code #007

5 Credits

Prerequisite: Fine Arts II with a grade of C or better

Art III involves an in-depth study of art principles, elements, and concepts, and their role in cultures past and present. A strengthening of technical skills is sought. There is a greater awareness of what the creative process involves - a deeper knowledge of outer and inner reality. Additional opportunities and experiences are offered. Mastery of techniques and skills are emphasized as tools of self-expression.

Suggested Sequel: Fine Arts IV

AP ART STUDIO (Grades 11- 12)

Course Code #012

5 Credits

Prerequisite: Fine Arts III with a grade of C Or better or Teacher Recommendation

AP Art Studio is designed for the more artistically mature individual. The student at this stage (because of greater understanding of himself, his environment, his materials, and the creative process) should be able to work well independently, with a greater measure of assurance and achievement. In AP Art Studio there is greater student involvement in individual projects with emphasis on further study or career in art.

BUSINESS AND INFORMATION TECHNOLOGY DEPARTMENT

COURSE DESCRIPTIONS

The courses that follow have suggested sequences listed. However, students in other grade levels may take a particular course with department approval.

INTRO TO BUSINESS (Grade 9-10)

Course Code #145

2.5 Credits



This course introduces students to the world of business and prepares them for the economic roles of consumer, worker, business owner, and citizen. The course will serve as a background for other, more detailed business courses, such as Accounting, Marketing and Entrepreneurship, as well as preparation for future employment, financial literacy and consumer decision-making.

ACCOUNTING I (Grades 10-12)

Course Code #101

5 Credits

Prerequisite: Introduction to Business

The main purpose of this course is to prepare students for entry-level jobs in bookkeeping and accounting, in both small and large businesses. This course is a must for the student who is thinking of entering into his or her own business or partnership. We will address the impact of technology on Accounting with integrated computerized accounting activities using Peachtree Accounting, Glencoe Integrated Accounting Spreadsheet Templates, internet activities and illustrations of real world documents.

MARKETING (Grades 11-12)

Course Code #110

5 Credits

Prerequisite: Introduction to Business

Want to know more about Starbucks, Nike, Costco, Finish Line, Nordstrom, Safeway or Claires? How did they become successful? They hire people with marketing skills! In this course, you will explore all aspects of marketing including promotion, selling, merchandising, customer service and business fundamentals. This hands-on class will prepare you for

employment in marketing-related jobs or pursue a college degree.

Students will learn and apply marketing concepts daily by working in and operating The Caper Tiger School Store.

ENTREPRENEURSHIP (Grades 11-12)

Course Code #146

2.5 Credits

Prerequisite: Marketing

Do you dream of being your own boss? Do you plan to open your own business someday? Do you have a great idea for a product or service? Entrepreneurship and Small Business Management will provide you with the tools and experience needed to become a successful entrepreneur. You will learn what it takes to go into business for yourself and also experience the issues that must be addressed in order for your business to survive, grow, and profit by business planning under a mentorship of local business owners. This course will teach you about feasibility and business planning, market analysis, the different types of business ownership, the legal environment, and how to select a business site and plan its layout.

GRAPHIC DESIGN (Grades 9-12)

Course Code #111

2.5 Credits

This is a hands-on, half-year course that will teach students the basics of desktop publishing and graphic design. Students will learn how to design and create newsletters, invitations, flyers, menus, business cards and numerous other business publications using Microsoft Publisher 2007. Students will also learn the latest programs: Adobe InDesign CS3, Adobe Photoshop CS3, and Adobe Illustrator CS3. This is a



practical course for students who are planning to enter the job market directly as well as those who will study graphic design in college.

Suggested Sequel: Publication Media & Design



MACRO ECONOMICS (Grades 11-12)

Course Code #5110 2.5 Credits

This concurrent course meets the General Education requirement for Social Science at ACCC and is a semester offering for students who are part of the Pre-College program. It will provide academically talented and highly motivated high school juniors and seniors the opportunity to earn high school credit and college credit simultaneously and receive instruction from a college professor while still attending the LCMR campus. The course offers an introduction to macroeconomics analysis stressing national income and product, employment, monetary and fiscal policies and their interrelationship, and economic growth.

This course was designed to provide Desktop Publishing/Office Publications in Business students with hands-on experience in the publication world. Students who have completed **Graphic Design** or **Desktop Publishing** can now gain valuable work experience in publications by putting their skills to work. Students will experience real life situations in the workplace and use the latest technological advancements in the business world by designing and producing numerous school publications

PUBLICATION MEDIA & DESIGN (Grade 12)

Course Code #128 5 Credits

Prerequisite: Desktop Publishing/Graphic Design & Teacher Permission



TELEVISION & MEDIA DEPARTMENT - COURSE DESCRIPTIONS



INTRODUCTION TO TELEVISION AND MEDIA (Grades 9-10)

Course Code #130

2.5 Credits

Students will function in a working television studio. The students will use information and techniques acquired in Art of Digital Media to implement a weekly news show that will be broadcast in the High School. Students will work on special projects including at least one short film of the student's choice. They will be performing, editing, sound mixing, working as talent, using camera techniques and other broadcast jobs while advancing in their knowledge of the TV industry. Students have the ability to earn college credit at Atlantic Cape Community College by taking this course and enrolling in the Dual credit program.

Suggested Sequel: Intermediate TV & Media

INTERMEDIATE TELEVISION AND MEDIA (Grades 10-12)

Course Code #134

5 Credits

Prerequisite: Introduction to Television & Media

TV/Media III is for the student who has successfully completed TV/Media II and is going to be involved in the production of the weekly news show which will be broadcast once a week during the school year. The student needs knowledge in the mixing, sound and camera operation for a broadcast. These students will also have the opportunity to make a short film during the year. They will be responsible for two after-school activities a month during the school year, not to exceed 18 news pieces out of school. These students will also serve as mentors to the TV/Media II students in their weekly news productions. Lastly, the students will have an opportunity to work on advanced camera shooting on location as well as on Final Cut Express.

Suggested Sequel: Advanced TV & Media

ADVANCED TELEVISION AND MEDIA (Grades 11-12)

Course Code #140

5 Credits

Prerequisite: Intermediate Television & Media, and teacher recommendation.

This is for the fourth level of a series of TV/Media Production Courses designed to provide students with skills and understandings in writing, producing, editing, and performing TV/Media Production Programs. Students in the course will assume a leadership role as they work with students in TV/Media II and III. Specific responsibilities will include: production planning, direction, producing, and the overall evaluation of the final product.

ENGLISH DEPARTMENT – COURSE DESCRIPTIONS

Philosophy of Grades 9-12 English Language Arts

The English Language Arts Department of Lower Cape May Regional High School believes that its primary responsibility is to provide students with an educational experience which will insure that they are prepared to meet the demands of an ever-changing world. We acknowledge our responsibility to develop and integrate the five (5) skill standards which are collectively known as the “English Curriculum”: reading, writing, speaking, listening, and viewing; and we recognize the need to emphasize critical and creative thinking as vital ingredients of each skill. We further recognize our responsibility to provide instruction which is enhanced by a developmentally appropriate curriculum and which will prepare our students for effective study in post-secondary education; and/or prepare our students to perform productively in the work place of the 21st Century.

Students must take English each year in a four year sequence selecting the course level which will best meet their further study, career, or lifetime needs. Students will only be permitted to move from one level to another by teacher and/or administrative recommendation. Further, students who have failed English will not be permitted to take the next level of English until they have passed the previous course (unless they are seniors).

9th GRADE COLLEGE BOUND ENGLISH

Course Code #241

5 Credits

The 9th grade college bound program serves as a literature survey course geared toward presenting the student with the background necessary for future college bound courses. Areas of study will include the short story, drama (both classical and contemporary), poetry, the novel, and non-fiction. Selections will be designed not only to enhance comprehension skills but also to teach analyzing of literature as well. Students will be exposed to literature that presents the broad scope of writing reflective of numerous ethnic cultures. Additionally, students will work on formal essay writing. The 9th grade curriculum will stress development of the five-paragraph essay and beyond. Students will be introduced to developing thesis statements and guiding their writing to support their thesis. Writing will range from in-class essays to essays explicated from the novels read. Also, vocabulary development will be stressed to help prepare students for their P.S.A.T. and S.A.T. Finally, Students will participate in a number of discussion formats ranging from in class discussions to informal oral presentations and culminating in at least one formal class presentation.

Requirements: Tests, quizzes, essays, projects, and outside readings (both teacher and student selected).

9th GRADE HONORS ENGLISH

Course Code #244

5 Credits

Prerequisite: Successful completion of 8th Grade English with at least a 93 and teacher recommendation

The 9th Grade Honors program will follow the same course description as the 9th Grade College Bound except at a more accelerated pace. Consequently, the student will be able to experience a greater selection of material. These will be in the form of both classroom readings and outside readings.

10th GRADE COLLEGE-BOUND ENGLISH

Course Code #246

5 Credits

The 10th grade college-bound program will provide the college-bound student with a comprehensive background in World Literature. Novels will be assigned to be read. Vocabulary lessons will be given to prepare the student for the Preliminary Scholastic Aptitude Test (PSAT).

10th GRADE HONORS ENGLISH

Course Code #245

5 Credits

Prerequisite: Teacher recommendation and 93+ in 9th Grade College Bound English

To provide academically talented and highly motivated high school sophomores with college level courses.

11th GRADE COLLEGE-BOUND ENGLISH

Course Code #251

5 Credits

The 11th Grade College-Bound program will provide the college-bound student with a comprehensive background in American Studies.

It will also expand the writing, speaking, listening, and research skills developed on the 11th grade level.



COMPOSITION I (Grades 11-12)

Course Code #5101, 5 Credits

Prerequisite: Placement test score.

This half-year concurrent course meets the General Education requirement for Communication at ACCC (dual credit) and is a fall semester offering for students who are part of the Pre-College program. It will provide academically talented and highly motivated high school seniors the opportunity to earn high school and college credit simultaneously and receive instruction from a college professor while attending school the LCMR campus.

Suggested Sequel: Composition II



COMPOSITION II (Grades 11-12)

Course Code #5102, 5 Credits

Prerequisite: Composition I with a grade of C or better

This half-year concurrent course meets the General Education requirement for Communication at ACCC (dual credit) and is a fall semester offering for students who are part of the Pre-College program. It will provide academically talented and highly motivated high school seniors the opportunity to earn high school and college credit simultaneously and receive instruction from a college professor while attending school the LCMR campus.

AP ENGLISH 11 (English Language and Composition)

Course Code #263

5 Credits

Prerequisite: 93 or better in 10th grade English and teacher recommendation

The Advanced Placement course emphasizes the expository, analytical, and argumentative writing that forms the basis of academic and professional communication, as well as the personal and reflective writing that fosters the development of writing facility in any context. The purpose of this course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. Because the expectations of the student's

performance are set to a high standard, the amount of reading and study required many often seem demanding. It is important to understand that the scope and depth of the AP course reaches far beyond that of the high school College Bound English course. Participants must be willing and capable of embracing the many new challenges presented to them.

12th GRADE COLLEGE-BOUND ENGLISH

Course Code #256 5 Credits

The 12th Grade College-Bound program will provide the college-bound student with a comprehensive background in European Literature. It will also expand the writing, speaking, listening, and research skills developed on the 11th grade level.

AP ENGLISH 12

(English Literature and Composition)

Course Code #262 5 Credits

Prerequisite: Teacher recommendation and 93+ in 11th Grade College Bound English

This course will provide academically talented and highly motivated high school seniors with AP course rigor. Participants must be willing and capable of embracing the many new challenges presented to them.



ACTING/STAGECRAFT (Grades 9-12)

Course Code #272 5 Credits

Acting/Stagecraft is a full-year course intended to develop in the serious student of the theater basic and intermediate acting and stagecraft skills in preparation for a portfolio. The first quarter will include lessons and activities involving improvisation, mime, role playing, the dynamics of body language and voice with emphasis on clarity, pacing, and variety of delivery. The second and third quarter will deal with the play as production. Emphasis will be placed on production design, the characteristics of stage color, lighting and costuming design, development and application of make-up, public relations, program coordination, the acoustics of sound, and general house management. During the fourth quarter the student will participate in significant scenes from great plays or will perform an entire short or one-act play with all directions and technical requirements being handled by the student. The course will also cover managerial skills such as the role of the director, stage and house managers, and the producer.

This course will fulfill the performing arts requirement.

HUMANITIES (Grades 11-12)

Course Code #259 5 Credits

This elective course will examine the development of Western thought as represented in selected works of the world's great creative artists and philosophers. In essence, the focus of this course will be on “the study of people – their natures, the full development of their faculties, the realization of their collective and individual aspirations, and the securing of a contiguous well-being for all.” Finally, the students examine representative works to identify the artist's response to the world in which he/she moves. Authors may include: Sophocles, Dante, Shakespeare, Orwell, Sartre, Camus, and R. Buckminster Fuller. Composers to be studied may include Gluck, Mozart, Beethoven, Schubert, Liszt, Wagner, and Cage. Painters and sculptors whose work will be discussed may include Michelangelo, Leonardo, Blake, Goya, Turner, Constable and Fusell. Choreographers Nijinsky, Balanchine, De Mille, and Jerome Robbins will be part of the catalogue of dancers whose works may be examined as well.

CREATIVE WRITING/MYTHS, LEGENDS AND FOLKLORE (Grades 10-12)

Course Code #282, 5 Credits

This elective is designed for the student who is proficient in English and who truly enjoys writing. Students will develop skills in journalistic writing including front page news, column writing, editorials, and local school news. Part of this process will include how to conduct an interview and how to be a responsible journalist. Students are encouraged to have at least a C+ average in English before signing up for this course. Interwoven in southern New Jersey's rich and fascinating history, are legendary tales of pirates, heroes, shipwrecks, and even ghosts. This part of the course introduces students to myths, legends, and folklore – some that originated in our own backyard. In addition to New Jersey myths, this course also includes study of myths and legends from around the world. This course is reading and writing based, and includes some independent research and projects.



SPEECH, PUBLIC SPEAKING & DEBATE (Grades 11-12)

Course Code #249, 5 Credits

This dual credit, year-long course will examine techniques of effective oration. During the first quarter, the class will listen, view, and read noteworthy speeches ranging from celebrities to educators to politicians. The class will dissect not only the content but the techniques used to convey your message in the most effective way. The second and third quarter will build on these examinations allowing students to research and then develop speeches of their own. Not only will students be asked to develop and deliver their speeches but they will also learn to constructively critique those of their classmates as well. Students will develop the following types of speeches: 1. Persuasive (debatable topic); 2. Informational; 3. Inspirational/Motivational; 4. Demonstrative (How to); 5. Extemporaneous speaking; 6. Entertainment. Finally, the fourth quarter will focus on the formal rules of debate and meeting etiquette (Robert's Rules of Order) and a class debate with a debriefing to follow.

AP SEMINAR (Grade 11)

Course Code #291, 5 Credits

Prerequisite: Student must be enrolled in at least one other AP course.

This course is the first level of the two-year Advanced Placement Capstone Program. In this course, students will investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. Students are assessed through two course performance tasks and one end-of-course exam. Students that successfully complete the Capstone Program will receive an AP Diploma endorsed by the College Board. The second course of the Capstone Program, AP Research, will be offered to 12th grade AP students beginning in the 2018-19 school year.

AP RESEARCH (Grade 12)

Course Code#292, 5 Credits

Prerequisite: AP Seminar and student must be enrolled in at least one other AP course.

AP Seminar II Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan and conduct a year-long research-based investigation to address a research question. In this course, students further their skills acquired in the AP Seminar I course by understanding research methodology, employing ethical research practices and accessing, analyzing and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of 4000-5000 words (accompanied by a performance or exhibition of product, where applicable) and a presentation with an oral defense.

CULINARY ARTS– COURSE DESCRIPTIONS

INTRODUCTION TO CULINARY ARTS (Grades 9-10)

Course Code #334 2.5 Credits

This is an introductory half-year class that is a prerequisite to other culinary and baking classes. In this course, the students will learn the basic fundamentals of the kitchen and food preparation. Units include safety/sanitation, knife skills, tools and equipment, culinary math and recipes along with nutrition. They will prepare a variety of foods to complement learned basic fundamentals.

Suggested Sequel: Culinary Arts II

CULINARY ARTS II (Grades 10-12)

Course Code #337 5 Credits

Prerequisite: Introduction to Culinary Arts with a grade of B- or higher.

Culinary Arts II is a full-year course with emphasis on reinforcement of Introduction to Culinary Arts basics & the development of more advanced culinary skill sets. Development of stocks, soups and sauces along with formal introductions of culinary applications will enhance the students' understanding of cooking techniques, seasonings and flavorings, breakfast cookery, baking and related global cuisine.

Suggested Sequel: Culinary Arts III

CULINARY ARTS III (Grades 11-12)

Course Code #338 5 Credits

Prerequisite: Culinary Arts II & teacher recommendation.

This full-year course will encompass all previously learned aspects of the Culinary Arts Program. Highlights of the year will focus on Grade Manger, protein preparation/production, and grains, legumes and pastas.

All aspects of culinary math will continue to be developed as well as the operating of both the front

and back of the operations of a full service a la carte' café on school premises.

The culmination of this course will be the preparation and testing for ServSafe Certification, a nationally recognized certification process currently mandated for many restaurant employees.

Students in this course will participate in structured learning experiences that include on and off campus catering and presentations. Students may also earn college credit at Atlantic Cape Community College or Walnut Hill College.



CULINARY ARTS IV

Course Code #343

5 Credits

Prerequisite: Completion of Culinary Arts III (Grade B or better) and instructor permission

This full year course is designed for the student that has an interest in pursuing a career in the field of Culinary Arts. Students will be introduced to kitchen management techniques, menu development, program marketing and electronic data base formatting as it is related to the department. Additionally, students will act as Executive Sous Chefs while they are in a classroom management capacity which will include off-site events, and will be required to present as facilitators for all department-related events before, during or after school hours.

FASHION DESIGN – COURSE DESCRIPTIONS

ART & DESIGN OF FASHION – 1 (Grades 9-12)

Course Code #340

5 Credits

Do you watch people on the street and observe what they are wearing? Are you happiest when you are combining colors, feeling fabric, and just generally being creative? Then, “Art & Design of Fashion” class may be for you. This class is an introductory full year course open to all grades in which students learn about clothing, fashion and basic sewing techniques. Students will study the elements of color and design and how they relate to the fashion and apparel industry. This course emphasizes the basics of the sewing and serger sewing machines, patterns, fabrics and notions. Students will learn to sew and create their own fashions and participate in a fashion show.

Suggested Sequel: Art & Design of Fashion – 2

ART & DESIGN OF FASHION – 2 (Grades 10-12)

Course Code #341

5 Credits

Prerequisite: Art & Design of Fashion - 1

Art & Design of Fashion-2 is a full year course for the student who wishes to further explore the Fashion World. Students will study the role of fashion and the fashion industry. They will explore famous fashion designers, fads and fashion trends. Students should have mastered basic techniques of sewing construction and wish to work beyond the beginner level. Projects will include a wide range of applications that can be worn or marketed for consumer use. Experience gained in this course can help students to find practical and inexpensive ways to expand their wardrobes. Students will continue to create projects and showcase them in the end of the year fashion show.

Suggested Sequel: Art & Design of Fashion – 3

ART & DESIGN OF FASHION – 3(Grades 11-12)

Course Code #342

5 Credits

Prerequisite: Art & Design of Fashion – 2

This course is a full year fashion/sewing class. The class is offered to students who have a strong interest and advanced skills in the area of clothing and fashion. Students will study the history of fashion and create a portfolio of historical costumes. Students will also be responsible for creating and designing their own clothing collection. Students will plan projects that enhance and challenge his/her sewing skills level. Students will plan and organize an end of the year Fashion show which showcases all three levels achievements.

ART & DESIGN OF FASHION – 4 (Grade 12)

Course Code #346

5 Credits

Prerequisite: Art & Design of Fashion-3

This course is the fourth level in the fashion design and sewing curriculum. Students will explore reusing materials, researching designers that work with recycled materials and the processes taken to use recycled items for designing clothing and accessories. Following research students will design and construct an article of clothing or accessory utilizing recycled items, collecting the supplies needed to create the piece. The second half of the year will be focused on interior design. Revisiting color schemes and researching effective room designs. Students will have the opportunity to design multiple room layouts along with trying their hand at a quilting project. Students will act as an additional resource for project help in the classroom if the teacher is assisting other students in the class.



INDUSTRIAL ARTS DEPARTMENT – COURSE DESCRIPTIONS

INTRODUCTION TO INDUSTRIAL ARTS (Woodworking Design) (Grades 9-12)

Course Code #311 2.5 Credits

This is a half-year course designed to give students a basic overview of the three industrial education areas (Mechanical Drawing, Architectural Drawing, and primarily Wood Working) offered at Lower Cape May Regional High School. Students will learn and work progressively and cooperatively with peers and instructors on project oriented activities. Industrial Education curriculum exploration, self expression, shop safety, dimension reading, practical math skills, hand/eye coordination, problem solving and working with others are the learning objectives strived for in this course.

INTRODUCTION TO INDUSTRIAL ARTS (Graphic Representation and Computer-Aided Design) (Grades 9-12)

Course Code #310 2.5 Credits

This is a half-year Industrial Arts/Technology course designed to develop the student's understanding of the graphic language used in industry. Students will be introduced to traditional and computer-aided drafting tools currently being used in the drafting industry. Using these tools, students will be required to complete geometric construction, orthographic projection, isometric pictorials, oblique pictorials, sectional, and auxiliary view drawing according to drafting standards used in industry.



COMPUTER-AIDED TECHNICAL DRAWING & DESIGN (Grades 10-12)

Course Code #320 5 Credits

Prerequisite: Introduction to Industrial Arts (Graphic Representation & CAD Recommended)

This is a full-year Industrial Arts/Technology Level II mechanical drawing course designed to further develop the student's drafting skills and comprehension. The course will include the use of traditional drafting tools and sketching skills but will primarily rely on computer-aided drafting (CAD) tools to complete various mechanical drawing problems. The student will become competent in reading and reproducing the graphic language used in industry (detail and assembly drawings, welding symbols, thread notes, etc.) The use of technical journals, texts, charts, and tables will be incorporated into daily drawing assignments.

ARCHITECTURAL DRAFTING & DESIGN (Grades 11-12)

Course Code #321 5 Credits

Prerequisite: Computer-Aided Technical Drawing & Design

This is a full-year Industrial Arts/Technology course designed to give the student a basic understanding of the materials, the processes, and the drawings involved in constructing a residential building. The student will become familiar with design principles, architectural symbols, styles, variations, and structural members used in constructing a home. The student will design and develop a complete set of working drawings, which will include floor, foundation, electrical plans, wall sections and elevations. Students will incorporate the use of computer-aided drafting (AUTOCAD, AUTODESK ARCHITECTURAL DESKTOP and REVIT) software along with traditional drafting tools throughout the course. Upon completion of required working drawings, students will be introduced to pictorial drawing (one- and two-point perspectives), rendering and scale model construction. Studies will include American architecture and architects.

INDEPENDENT STUDY IN DRAFTING & DESIGN

(Grade 12)

Course Code: #308

5 Credits

Prerequisite: Successful completion of all courses in Drafting curriculum



This is a full-year Industrial Arts/Technology drafting course designed to further develop the student's traditional and computer-aided drafting skills and comprehension. It is designed

for the student that has completed and excelled in every drafting course offered by our drafting program. The student must meet the drafting instructor's approval and an individual program/course of study must be established prior to acceptance into the independent study. Independent Study in Drafting and Design is a course developed to provide for the needs of the gifted drafting student.

BASIC WOODWORKING (Grades 10-11)

Course Code #325

5 Credits

Prerequisite: Introduction to Industrial Arts

This course is a basic woodworking course. Students will acquire basic knowledge and fundamental skills in using hand tools and basic machine tools. Students will develop desirable habits such as dependability, resourcefulness, craftsmanship, and the ability to work and cooperate with others. Units in safety, reading drawings, and planning of projects will be covered. Safety rules are emphasized and sound working habits are developed. A number of small projects will be required.

WOODWORKING DESIGN & TECHNOLOGY

(Grades 11-12)

Course Code #326

5 Credits

Prerequisite: Basic Woodworking

This course is a continuation of Basic Woodworking. Students will increase their skills in the use of hand tools and machine tools. Students will be encouraged to use their own ingenuity and skills to solve everyday problems. Safe and proper habits are stressed along with proper set-up and operation of woodworking equipment. Larger and more difficult projects are required.

Suggested Sequel: Cabinet Making & Design

CABINET MAKING & DESIGN (Grade 12) Course Code #327

Prerequisite: Woodworking Design & Technology

This course is for the senior who is planning a possible career in the trades, or who is planning to enter college in a related field. Students should exhibit advanced woodworking skills. Students will gain a high degree of skill in this field. Students will be encouraged to solve problems, calling on the instructor for advice. Students will be working independently on larger, sophisticated projects. Safety and developing good work habits will be emphasized.



ENGINEERING STUDIES - COURSE DESCRIPTIONS



INTRODUCTION TO ENGINEERING DESIGN (Grades 9-10)

Course Code #315

5 Credits

Prerequisite: 9th grade students must be enrolled in either Honors or College Bound Geometry. 10th Grade students must be enrolled in either Honors or College Bound Algebra II

This course is designed for those students considering a career in Engineering. This course teaches problem-solving skills using a design development process. Models are created and analyzed using computer design software. Principles of design and drawing for production and CAD will give selected students a foundation for completing a four year sequence of courses which will include college credit. Additional courses will become available as the district develops its **Project Lead The Way Engineering Academy**. An articulated college credit option is available. Eligible students may apply through their instructor.



PRINCIPLES OF ENGINEERING (Grades 10-11)

Course Code #314

5 Credits

Prerequisite: Introduction to Engineering, Geometry, Algebra II (can be taken concurrently)
Chemistry

This is the second year engineering course for students interested in the technical trade of the profession of engineering. This course explores the definition and types of engineering, problem solving techniques, engineering processes, and systems. An articulated college credit option is available. Eligible students may apply through their instructor.

Suggested Sequel: Civil Engineering



CIVIL ENGINEERING & ARCHITECTURE (CEA) (Grades 11-12)

Course Code #313

5 Credits

Prerequisite: PLTW – Principles of Engineering

The major focus of the Civil Engineering and Architecture™ (CEA) course is a long-term project that involves the development of a local property site. As students learn about various aspects of civil engineering and architecture, they apply what they learn to the design and development of this property. The course provides freedom to the teacher and students to develop the property as a simulation or to students to model the real-world experiences that civil engineers and architects experience when developing property.

The CEA course is intended to serve as a specialization course within the Project Lead The Way® sequence. The course is structured to enable all students to have a variety of experiences that will provide an overview of both fields. Students work in teams, exploring hands-on projects and activities to learn the characteristics of civil engineering and architecture.

In addition, students use Rivet, which is a state of the art 3D design software package from AutoDesk, to help them design solutions to solve their major course project. Students learn about documenting their

project, solving problems, and communicating their solutions to their peers and members of the professional community of civil engineering and architecture.

The course of study includes:

- The Roles of Civil Engineers and Architects
- Project Planning
- Site Planning
- Building Design

An articulated college credit option is available. Eligible students may apply through their instructor.

ENVIRONMENTAL SUSTAINABILITY (Grades 11-12)

Course Code#845

5 Credits

Prerequisite: Civil Engineering or AP Biology or Recommendation

Environmental Sustainability is a full year Capstone Engineering Course for students who have completed the first 3 courses of the PLTW sequence. Students will investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply and renewable energy. It is strongly recommended, but not required, that students take this course along with Civil Engineering & Architecture. Students who pass the end of course exam for ES can receive college credits.



DIGITAL ELECTRONICS (Grades 11-12)

Course Code #142

5 Credits

Prerequisite: Civil Engineering

Digital Electronics is one of the three foundation courses in our Project Lead The Way Engineering Program. Students will use computer simulation to learn about the logic of electronics as they design, test, and actually construct circuits and devices. Students participating in this and each of the foundation courses and Civil Engineering and Architecture will have an opportunity to apply and test for portable college credit at Rochester Institute of Technology. This course will extend and apply information learned in the IED course. It is recommended as the third course in the series of five available in the PTLW Engineering program. An articulated college credit option is available. Eligible students may apply through their instructor.

COMPUTER SCIENCE STUDIES - COURSE DESCRIPTIONS



AP COMPUTER SCIENCE PRINCIPLES (Grades 9-12)

Course Code #100

5 Credits

Using Python as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. CSP helps students develop programming expertise and explore the workings of the internet. Projects & problems include app development, visualization of data, cyber security and stimulation. This course curriculum is a College Board-approved implementation of AP Computer Science Principles.



AP COMPUTER SCIENCE A (Grades 10-12)

Course Code#105

5 Credits

Prerequisite: AP Computer Science Principles

In this course, students collaborate to create original solutions to problems of their own choosing by designing and implementing user interfaces and web-based databases. Students will also create a game for their friends or an app to serve a real need in their community. This course is aligned to the AP Computer Science A framework and students enrolled in this course who successfully pass the AP Computer Science A exam can earn college credits at participating colleges & universities.



CYBERSECURITY (Grades 11-12)

Course Code#125

5 Credits

Prerequisite: AP Computer Science A

Cybersecurity introduces the tools & concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. This course raises students' knowledge of & commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely.

MATHEMATICS DEPARTMENT – COURSE DESCRIPTIONS

ALGEBRA I (Grades 9)

Course Code #501 5 Credits

Prerequisite: Requires freshman placement criteria.

Algebra I contains the standard topics of first year Algebra. This course provides many ways to look at problems in Algebra: algebraically, graphically, using tables and charts, through real-life modeling, using reasoning, and using technology. Students learn to use Algebra to solve problems in the real world.

Suggested Sequel: Geometry

ALGEBRA I -BLOCK (Grade 9)

Course Code #504 10 Credits

Prerequisite: Requires freshman placement criteria.

Algebra I Block contains the standard topics of first year Algebra. This course provides many ways to look at problems in Algebra: algebraically, graphically, using tables and charts, through real-life modeling, using reasoning, and using technology. Students learn to use Algebra to solve problems in the real world. This course presents a decelerated curriculum, offering students additional time to solidify concepts. Suggested Sequel: Geometry

INTRODUCTION TO ALGEBRA II (Grades 10- 12)

Course Code #514 5 Credits

Prerequisite: Algebra I & Geometry

This course is designed to extend the concepts taught in Algebra I and Geometry, by exploring the introductory units of Algebra II. This course is particularly suited to students who began their High School math program with Algebra IA and do not have the skill confidence to complete Algebra II. Concepts studied include reasoning and problem solving skills, factoring polynomials, solving rational and complex expressions, and solving systems of linear equations. Students who successfully complete this course should be prepared to take the Accuplacer College Placement Exam with the expectation of being placed in a credit bearing college math class, thus avoiding a remedial college placement. Suggested Sequel: Algebra II

ALGEBRA II (Grades 10-12)

Course Code #502 5 Credits

Prerequisites: Algebra I, Geometry

This course is designed to complete the automation of the fundamental skills of algebra. A basic review of Algebra I concepts such as solving linear equations and inequalities and systems of linear equations and inequalities solved algebraically or by graphing are contained in the first three units. Integrating Algebra and Geometry and exploring data are covered throughout the course. Topics include polynomials, powers, roots, complex numbers and logarithmic and exponential functions. Suggested Sequel: Pre-Calculus



HONORS ALGEBRA II (Grade 10)

Course Code #547 5 Credits

This is an honors course for highly motivated students. In this full-year course students will complete the automation of the fundamental skills of algebra. A basic review of Algebra I concepts such as solving linear equations and inequalities solved algebraically or by graphing are contained in the first three units. Integrating Algebra and Geometry and exploring data are covered throughout the course. Also included will be in-depth look at functions including exponential, logarithmic, polynomial and rational. Complex numbers, powers, roots, the unit circle, the law of sines and law of cosines and trigonometric identities are also covered.

Suggested Sequel: Honors Pre-Calculus

GEOMETRY (Grades 9-12)

Course Code #541 5 Credits

Prerequisite: Algebra I

This is a full-year course to introduce and apply the concepts of Geometry. This course is designed to integrate Algebra and Geometry with an extensive use of coordinate Geometry. Topics to be studied are reasoning, lines in a plane, congruent triangles, properties of triangles, polygons, similarity, circles and right triangles.

Suggested Sequel: Algebra II

HONORS GEOMETRY (Grade 9)

Course Code #546 5 Credits

Prerequisites: Algebra I & recommendation

This course is an honors-level course for highly motivated students. In this full-year course students will learn and apply the concepts of Geometry. Topics to be studied are reasoning, lines in a plane, congruent triangles, properties of triangles, polygons, similarity, circles and right triangles. In addition to the traditional geometric topics, students will study vectors, Trigonometry and transformations of the plane. Also included will be a review of the topics of Algebra I.

Suggested Sequel: Honors Algebra II

PRE-CALCULUS (Grades 11-12)

Course Code #542 5 Credits

This course provides a concise review of algebraic and trigonometric concepts and provides a strong preparation for Calculus. Trigonometric functions are presented from both the unit circle approach and the right triangle approach. Topics covered include algebraic, exponential, logarithmic, and trigonometric

functions and their graphs, as well as Analytic Geometry in preparation for a course in Calculus.

Suggested Sequel: Calculus



AP PRE-CALCULUS (11-12)

Course Code #512

5 Credits

Prerequisite: C or better in Honors Algebra II

This is an honors level course for highly motivated mathematics oriented students. The course will prepare students for AP Calculus. The content stresses several advanced mathematics concepts including functions, logarithms, probability, and trigonometry including both the right triangle and unit circle approaches. The students will finish the year studying the concept of a “limit”. A dual college credit option is available with ACCC. Eligible students may apply through their instructor.

Suggested Sequel: AP Calculus

CALCULUS (Grade 12)

Course Code #505 5 Credits

Prerequisite: Pre-Calculus

Calculus is a course for students with complete knowledge of slope, tangent, distance formula, absolute value, Trigonometry, and other basic algebraic and geometric concepts. The course will include limits, derivatives, and integrals with heavy emphasis on graphing. This course should provide the successful student with sufficient knowledge to waive one semester of college Calculus.



AP CALCULUS (Grade 12)

Course Code #509 10 Credits

Prerequisite: Pre-Calculus, Honors

Pre-Calculus & teacher recommendation.

AP Calculus is an Honors level course for students with complete knowledge of slope, tangent, distance formula, absolute value, Trigonometry, and other basic Algebraic and Geometric concepts. The course will include limits, derivatives, and integrals, with heavy emphasis on graphing. This course should provide the successful student with sufficient knowledge to waive one semester of college Calculus if he/she receives a passing grade on the AP exam. This course will meet every day for two (2) periods. A dual college credit option is available with Stockton University. Eligible students may apply through their instructor.

AP STATISTICS (Grades 11-12)

Course Code# 513 5 Credits

Prerequisite: Algebra II (grade of C or higher)

This year-long course will be an introductory, non-calculus based elective math course that can serve as an alternative to fulfilling the State of New Jersey's credit requirement, as a class that is an extension of Algebra I. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the course: exploring data, sampling & experimentation, anticipating patterns, and statistical inference. Throughout the course, students will use technology to assist them in the following: investigations, problem solving, and writing as they build conceptual understanding. The sequence of the course allows for students to be properly prepared to take the AP Statistics exam should they choose that as an option.



STATISTICS (Grades 11-12)

Course Code# 560 5 Credits

Prerequisite: Algebra II

This year-long course will be an introductory, non-calculus based elective math course that can serve as an alternative to fulfilling the State of New Jersey's credit requirement, as a class that is an extension of Algebra I. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the course: exploring data, sampling & experimentation, anticipating patterns, and statistical inference. Throughout the course, students will use technology to assist them in the following: investigations, problem solving, and writing as they build conceptual understanding. A dual college credit option is available. Eligible students may apply through their instructor.

MUSIC DEPARTMENT – COURSE DESCRIPTIONS

SYMPHONIC BAND (Grades 9-12)

Course Code #602 5 Credits

Open to all students in grades 9 through 12, Symphonic Band is a five-credit course that meets four days per week. Musicians explore and perform music of all styles on instruments of their choice. Performance commitments include two to four concerts per year, three community parades, lessons, and Commencement Exercises.



MODERN MUSIC PRODUCTION (Grades 11-12)

Course Code #615 2.5 Credits

Students in this course will learn the fundamentals of music composition and production as they use iPads, computers and other digital devices to create music. This is a project based course where students will apply new knowledge of musical form, notation and structure to develop individual and group compositions.

CHOIR (Grades 9-12)

Course Code #603 5 Credits

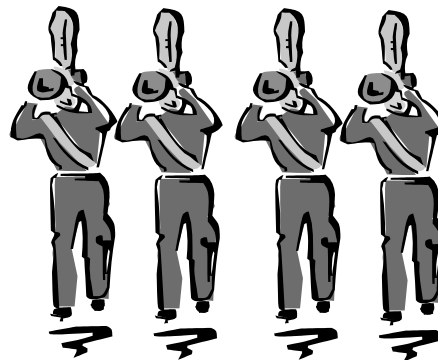
The LCMR Choir rehearses four days per week, examining the choral elements of art, folk, and popular music. Class instruction also includes the theoretical, historical, and creative aspects of vocal performance. Individual and group instruction lead to large and small ensemble performances, including the Winter and Spring Concerts. The Choir also represents the school at various organizations include the Choral Ensemble, and the opportunity to vocalize in jazz, barbershop, and treble harmonies. Beginners are welcome and encouraged to participate.



ORCHESTRAL STRINGS (Grades 9-12)

Course Code #613 5 Credits

This class offers violin, viola, cello, and string bass instruction. Students will learn how to play and read music in preparation for performance in the L.C.M.R. High School Orchestra. The course will offer basic theoretical concepts to develop a further understanding of music. School-owned instruments will be provided. Beginners are welcome.



MUSIC HISTORY/MUSIC THEORY

(Grades 9-12)

Course Code #605

5 Credits

Prerequisite: Any other music course



MUSIC HISTORY

This course is designed to provide a foundation for future study. Through intensive listening, the student develops concepts of musical form and techniques. These concepts are applied to a systematic study of various types of music. Fundamentals of music theory are incorporated, such as harmonic analysis, in order to better understand the compositional changes in music through time.



MUSIC THEORY

This course provides an introduction to the fundamentals of theory and harmony in musical composition. Basic scales, keys and chord structure are presented. Throughout the semester dictation, harmonic analysis, and basic composition and arranging are taught.



PIANO I (Grades 9-12)

Course Code #610

2.5 Credits

Piano I covers the theoretical, historical, and performance aspects of the piano. Individual and class instruction will be provided. A piano at home is an asset, but not essential. The class size will be limited due to the nature of the course and the number of pianos available. This course is designed for beginners only.

Suggested Sequel: Advanced Piano

ADVANCED PIANO (Grades 9-12)

Course Code #601

5 Credits

Prerequisite: Piano I or previous private instruction

Advanced Piano yields an in-depth analysis of the piano, including its historical, theoretical, and performance qualities. Literature includes the art, folk, and pop idioms. The course includes individual and class instruction. The class size is limited due to the nature of the course and the number of pianos available. Enrollment is contingent upon the successful completion of Piano I or the approval of the instructor.

Suggested Sequel: To assist as an Accompanist for Choir

GUITAR I (Grades 9-12)

Course Code #616

2.5 Credits

Guitar I offers the student instruction on the guitar. A history of music written for guitar and basic theoretical concepts will be combined to develop a further understanding of music. Beginners are welcome and encouraged to participate.



ADVANCED GUITAR (Grades 9-12)

Course Code #607

5 Credits

Prerequisite: String Ensemble or teacher recommendation

Advanced Guitars is a sequential continuation of Guitar I. Further technical instruction on the bass, acoustic, and electric guitar in combination with analytical performance will expose the student to a wide repertoire of art music, folk music, and pop music.

PHYSICAL EDUCATION & HEALTH DEPARTMENT

COURSE DESCRIPTIONS

The Health and Physical Education Program involves two separate curricula. The objective of the Physical Education curriculum is to establish and reinforce a healthy lifestyle that includes regular physical activity.

Students will be assigned to three (3) quarters of Physical Education during the academic year. Students' grades are determined by their active participation in activities, preparation for class, as well as performance on skill tests and/or written quizzes. Students are required to change into appropriate active wear and have sneakers in order to receive credit. **Students are reminded to secure their personal belongings in the locker room during physical education class. The School is not responsible for lost or stolen items.**

Physical Education has two major components: physical and cognitive. Through participation in physical fitness tests, students will be able to determine their present level of fitness. Skill testing and written tests on certain class offerings will ascertain student knowledge of rules, scoring, and strategies. Student effort and cooperation during the instructional phases of Physical Education is essential for a successful and productive learning experience.

The Physical Education Program will also contain an elective component consisting of core strength and fitness training. While this program is focused on the student athlete and serves to enhance their athletic performance, it is open to all students, as space permits. Interested students should consult with their guidance counselor or their Physical Education teacher to enroll.

Physical Education activities include, but are not limited to:

- Badminton
- Basketball
- Fitness Testing
- Floor Hockey
- Lacrosse
- Lifetime Sports
- Soccer
- Softball
- Volleyball

Health topics include:

- Health/Wellness
- Nutrition
- Healthy/Unhealthy Relationships
- Sexual Assault
- Bullying/Harassment
- STD's
- Alcohol/Smoking
- Driver Education (Students will culminate the course by taking the New Jersey State Written Exam sophomore year)
- Theories of Personality
- Responsibilities of Marriage and Family
- Abstinence, Reproduction and Sexuality
- Communicating Effectively
- Safety & First Aid

Each Health course will incorporate the State requirements for drug/alcohol education.



9th GRADE HEALTH

9 Week Course. This is a comprehensive health course which addresses a diversity of topics, including Values and Decision-Making, Foundations of Relationships, Human Reproduction, and Responsible Personal Behavior. The primary focus of this course will be Family Life Education and Drug and Alcohol Awareness in order to meet the requirements mandated by the state of New Jersey.

Outside reading and parental involvement will be encouraged by various assignments throughout the nine weeks. The state of New Jersey mandated unit on family life will encompass: Interpersonal Relationships, Human Development, Sexuality, Reproduction, Responsible Personal Behavior, and Establishing and Strengthening Family Life.

10th GRADE HEALTH – CLASSROOM DRIVER EDUCATION

9 Week Course. The course in Classroom Driver Education is required for all 10th grade students. It consists of studying the Driver's Manual in preparation for a state written exam. It also explores a basic skills introduction to the theory of driving. Psycho-physical tests on eyesight, depth perception, color perception, and reaction time are also conducted.

vocabulary and knowledge as it relates to first aid procedures, health matters, and safety practices.



DANCE – COURSE DESCRIPTIONS

DANCE (Grades 9-12)

Course Code #650 2.5 Credits

Students will gain an understanding of fundamental dance principles and vocabulary through practical application as they apply basic dance theory, body mechanics, and alignment and execution with rhythmic acuity and accuracy. Students will gain practical experience in movement invention and be able to identify the elements of time, space, and energy as they pertain to many forms of dance. The course will also establish a good working knowledge of principles in anatomy and kinesiology.

DANCE II (Grades 9-12)

Course Code #651 2.5 Credits

Prerequisite: Dance I or Audition

Students will be able to increase their understanding of ballet, modern and jazz dance principles and be able to demonstrate by example a dance vocabulary derived from various historical perspectives through a study of the work of past generations of choreographers. In addition, students will gain practical experience in movement invention, expanding upon their personal movement vocabularies developed in the Dance I Curriculum.



ADVANCED DANCE (Grades 9-12)

Course Code #652 {Single Period-5 credits}

Course Code #653 {Double Period-10 credits}

Advanced Dance is for the serious dance student who has previous dance class experience and plans on continuing with dance after high school. In this class, students will study the history and technique of many important choreographers in Ballet, Jazz and Modern dance. Students will also study Dance Composition, Theater Management and the different careers in dance. Students will have the opportunity to choreograph their own dance(s) along with performing throughout the year. An audition is required for placement.



SCIENCE DEPARTMENT – COURSE DESCRIPTIONS

The suggested course sequence in Science for incoming students is as follows:

FRESHMAN: Biology or Honors Biology

SOPHOMORES: Biology, Chemistry, Environmental Science (Honors options available)

JUNIORS: Chemistry, Physics, Environmental Science, Marine Biology, AP Biology, AP Chemistry

SENIORS: Physics, Marine Biology, AP Physics AP Biology, AP Chemistry

BIOLOGY (COLLEGE BOUND) (Grade 9/10)
Course Code #822 5 Credits

Prerequisite: None

Biology is for all students. Beginning with a study of Cellular and Molecular Biology, the course logically moves into reproduction, genetics, evolution, and classification. Stress is placed on building a basic structure of biological principles upon which the student will build further concepts and will arrive at sensible conclusions.

Suggested Sequel: Chemistry



CHEMISTRY (COLLEGE BOUND) (Grades 10/11)
Course Code #827 5 Credits

Prerequisite: CB Biology and Algebra I

Chemistry is recommended for all students who wish to pursue an electronic, mathematical, analytical, para-professional (lab technician, LPN) and/or scientific career in college. Basic theoretical chemical principles emphasizing structure of elements will be covered. Energy and related changes during chemical reactions, the mole concept, solubility, equilibrium in reactions, quantum theory, and oxidation and reduction reactions are thoroughly investigated. Much attention is placed on the mathematical aspects of the chemical reactions.

It is recommended that those who wish to pursue this course have already completed Academic Science, Academic Biology, and the first year of Algebra.

Suggested Sequel: Physics or Science Elective

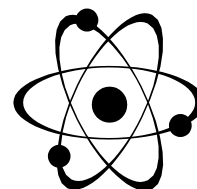
HONORS CHEMISTRY (Grade 10/11)
Course Code #855 5 Credits



Prerequisite: Honors Physical Science (with a B average), Algebra I & teacher recommendation.

This course is recommended for gifted and highly motivated students. The course prepares students for the rigors of the Advanced Placement Science program available to students in the 11th and 12th grades. Topics covered are similar to those studied in CB Chemistry but at this level the approach to content is more in-depth and at a more challenging pace.

Suggested Sequel: AP Biology



ENVIRONMENTAL SCIENCE (Grades 10-



12)

Course Code #841

5 Credits

Prerequisite: CB Biology

Environmental Science provides a second year in the biological study of nature for those students interested in increasing their understanding of the environment. Students will develop an understanding of ecological theory and principles and recognize how they apply to the human situation.

OCEANOGRAPHY /MARINE BIOLOGY



(Grades 11-12)

Course Code #834

5 Credits

Prerequisite: CB Biology, Algebra I

Oceanography and Marine Biology is a full-year course intended for students interested in the marine environment. Topics include physical and chemical aspects of sea water, ocean currents, marine geology and meteorology, the biological aspects of major marine biomes and, in particular, the local flora and fauna will be intensively investigated. Students have the ability to earn college credit at Stockton University by taking this course and enrolling in the dual credit program.

AP BIOLOGY (Grades 11)

Course Code #820 10 Credits

Prerequisite: Honors Chemistry

Math Recommendation: Algebra II & Teacher recommendation.

AP Biology is an honors-level course for juniors and seniors who wish to pursue careers in the field of biology. The twelve-lab requirement is designed to mirror an introductory college level course. Topics will include biochemistry, ecology, evolution, botany and molecular genetics.

PHYSICS (Grades 11/12 or with instructor's permission)

Course Code #838

5 Credits

Math Prerequisite: B+ or better in Geometry, Recommended co-enrollment in Calculus, Pre-Calculus or Algebra/Trigonometry

Science Prerequisite: Chemistry

Physics is strongly recommended for students wishing to enter a field in the sciences. Classical Physics includes mechanics, properties of matter, heat, sound, light, electricity, and magnetism. The laboratories stress discovery rather than confirmation.

AP PHYSICS (Grade 12)

Course Code #843 10 Credits

Prerequisites: Honors Chemistry, AP Biology or an A- or better in CB Biology Co-Requisite: Calculus or AP Calculus, & teacher recommendation.

AP Physics is an accelerated course addressing topics covered during the first two semesters of college level Physics. This course is designed for highly motivated seniors who wish to pursue a career in the sciences, engineering, medicine, computer technology, or a related field. The laboratory utilizes modern electronic collection techniques with student directed investigations that rely upon analytical thinking skills. The goal of the course is to prepare students for the AP Physics exam held the second week of May.



PRINCIPLES OF BIOMEDICAL SCIENCE (Grades 9-10)

Course Code #825 5 Credits

In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems. When students take this course and Human Body Systems they are eligible to earn dual credit with Atlantic Cape Community College.



HUMAN BODY SYSTEMS (Grades 10-11)

Course Code #830 5 Credits

Prerequisite: Principles of Biomedical Science

Students examine the interactions of human body systems as they explore identity, power, movement, protection & homeostasis. Exploring science in action, students build organs & tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Students take on the roles of biomedical professionals to solve real-world medical cases. When students take this course and Human Body Systems they are eligible to earn dual credit with Atlantic Cape Community College.



MEDICAL INTERVENTIONS (Grades 11-12)

Course Code #831 5 Credits

Prerequisite: Human Body Systems

In this Project Lead the Way course, students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

BIOMEDICAL INNOVATION (Grade 12)

Course Code #832 5 Credits

Prerequisite: Medical Interventions

In this Project Lead the Way course, students build on the knowledge and skills gained from previous courses to design their own innovative solutions for the most pressing health challenges of the 21st century.

SOCIAL STUDIES DEPARTMENT – COURSE DESCRIPTIONS

WORLD CULTURES CB (Grade 9)

Course Code #915 5 Credits

World Cultures is the first in a three-course series of required Social Studies classes. This course investigates change and continuity in human societies from pre-historic times to the present. This broad overview of world history and culture highlights people and institutions from around the globe.

HONORS WORLD CULTURES (Grade 9)

Course Code #957 5 Credits

Students will do an in-depth investigation of Western and non-Western global interaction. Ancient civilizations will be brought to the forefront with the current issues of the day. Themes such as: geography and history, global interaction, art, literature, technology, economics, and diversity will be present. Students will participate in debates, creative research projects, essays, analysis, discussion, historical research and technology.

U.S. HISTORY I CB (Grade 10)

Course Code #921 5 Credits

U.S. History I is the second required course for all students. Part A of this course begins with the study of the first Americans and discovery of the New World, followed by the Colonial American period and the American Revolution. Part B examines the development of American democracy through the 1900's. Over the course of topics, students will develop a greater understanding and awareness of our American heritage.

U.S.HISTORY I DUAL CREDIT (Grade 10)

Course Code #TBD 5 Credits

U.S. History I Dual Credit gives students the option to fulfill both their high school US History I requirement while earning college credit at Stockton University by taking this course and enrolling in the dual credit program. This course presents a comprehensive overview of the rise of America as an important New World nation state within North Atlantic civilization. The time period covered is colonization to approximately 1900.



Pre-AP U.S. HISTORY I (Grade 10)

Course Code #958 5 Credits

Prerequisite: All United States History I candidates must attain an “A” in 9th grade CB World Cultures and English or a “B” in 9th Grade Honors World Cultures and 9th Grade Honors English. A recommendation from the teachers of these courses is also required. If a student wishes to enter the course in their junior year, the above requirements still apply, and the students must have achieved an “A” in 10th grade CB English or a “B” in 10th grade Honors English.

Pre-AP & AP United States History is a two-year course of study dealing with the political, economic, military, social, intellectual, and cultural development of this nation's history from the colonial period to the present. This course focuses on content, analysis, and the written extrapolation of historical theses. Successful completion of the course with a “B” average or better will make the student a strong candidate for achievement on the Advanced Placement Examination offered by the National Testing Service in May of each year. All advance placement students are encouraged to take the exam, but it is not mandatory. A score of 3 to 5 will entitle the student to college credit for U.S. History and can equate into financial savings and the opportunity to take additional electives or to progress into the student's intended field of study sooner than is customary once the student enters college. Students who intend to challenge themselves with this course should be willing to tackle a large workload with academic and social maturity. The course is intended only for serious students who are searching for an academic challenge in an intellectually stimulating environment.

Korea and Vietnam, Nixon and Watergate, and the Carter, Reagan and Bush years. Particular attention is paid to presidential leaders and their accomplishments.

AP US HISTORY II (Grade 11)

Course Code #926 5 Credits

Prerequisite: All Advanced Placement (AP) candidates must attain an “A” in 9th grade CB World Cultures and English or a “B” in 9th Grade Honors World Cultures and 9th Grade Honors English A recommendation from the teachers of these courses is also required. If a student wishes to enter the course in their junior year, the above requirements still apply, and the students must have achieved an “A” in 10th grade CB English or a “B” in 10th grade Honors English.

Pre-AP & AP United States History is a two-year course of study dealing with the political, economic, military, social, intellectual, and cultural development of this nation’s history from the colonial period to the present. This course focuses on content, analysis, and the written extrapolation of historical theses. Successful completion of the course with a “B” average or better will make the student a strong candidate for achievement on the Advanced Placement Examination offered by the National Testing Service in May of each year. All advance placement students are encouraged to take the exam, but it is not mandatory. A score of 3 to 5 will entitle the student to college credit for U.S. History and can equate into financial savings and the opportunity to take additional electives or to progress into the student’s intended field of study sooner than is customary once the student enters college. Students who intend to challenge themselves with this course should be willing to tackle a large workload with academic and social maturity. The course is intended only for serious students who are searching for an academic challenge in an intellectually stimulating environment.

US HISTORY II CB (Grade 11)

Course Code #923 5 Credits

U.S. History II is a comprehensive course designed to trace the history of the United States from the 1900s to the present time. Students will develop a greater understanding and awareness of our American heritage. Some of the units and topics covered in this course include Western settlement, the making of big business, the growth of industrial America, the rise of party politics, the rise of the United States as a world power, the Progressive Era, Great Depression and New Deal, the “Cold War”,



US HISTORY II DUAL CREDIT(Grade 11)

Course Code #TBD 5 Credits

U.S. History II is a comprehensive course which enables students to earn dual credit with Stockton University while still in high school. This class covers the political, social, economic, and cultural aspects of America’s history, and examines events from approximately 1900 to the present. This course seeks to familiarize students with major characters, events, developments, and ideas in the United States from the end of the Civil War to the present. Topics include the rise and transformation of the urban-industrial order, the rise of the US to superpower status, and the fate of liberty in the US.

HUMAN CONSCIENCE/MINORITIES IN



AMERICA (Grades 10-12)

Course Code #956 5 Credits

The first half of this course is an in-depth study of minorities in America. Students will specifically examine the difficulties, struggles, intolerance, and contributions of African-Americans, Hispanics, Asians, Native Americans, Women, Middle Eastern, and people of political, sexual, and religious persecution. Students will be responsible for researching specific groups and being aware of current issues relating to these topics.

After completing this segment of the course, students will study the political, social, and cultural history, and circumstances which lead to the Holocaust. Initial study will include the history of Judaism and Jewish life and culture. Specific topics include the Nazi Party and its leaders, the establishment of laws against the Jews, the organization of ghettos, resistance, other victims, and the annihilation of the Jews. Field trips and speakers will complete a total picture for the learner. **This course provides dual college credits at Richard Stockton University.**

AP U.S. GOVERNMENT AND POLITICS
(Grade 12)

Course Code #930

5 Credits

Prerequisites: B or better in Honors U.S. History I and AP U.S. History II

This course will give students an analytical perspective on government and politics in the United States. Students will study general concepts used to interpret U.S. politics and the analysis of specific case studies. Content for this course includes constitutional underpinnings of the U.S. government, institutions of national government, public policy, and civil rights and liberties. This is a senior level course which involves a rigorous study in preparation for the Advance Placement test in U.S. Government and Politics.

SOCIOLOGY (Grades 11-12)

Course Code #965

2.5 Credits

This course is a full year course. The course offers instruction on primary concepts, terminology and methods of investigation used in sociology. Includes analysis of social stratification, various types of groups, social class, social change, deviancy, population growth and development of human resources.

INTRODUCTION TO PSYCHOLOGY



(Grades 11-12)

Course Code #940 2.5 Credits

Introduction to Psychology will provide an overview of human development, learning theories, psychological disorders, treatment strategies, and careers in the field of psychology. Through the use of classroom discussions, projects and presentations, students will explore theories of personality, memory and states of consciousness. A brief look at the brain and the biological basis of behavior, as well as, social and cultural influences on individual and group behavior will also be examined.

AP PSYCHOLOGY (Grades 11-12)

Course Code #953 5 Credits

This course will introduce students to the systematic and scientific study of behavior and mental processes of human beings and animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the other major subfields within psychology. They will also learn about the ethics and methods psychologists use in their science and practice. Students will take the AP Psychology exam in the spring

LAW ENFORCEMENT & PUBLIC SAFETY COURSE DESCRIPTIONS



INTRODUCTION TO CRIMINAL JUSTICE (Grades 9-10)

Course Code #953

5 Credits

This course will give the student an understanding of the criminal justice system. Students will explore the history and design of law enforcement, investigate the role and function of Police departments, and explore the process that occurs from the commission of a crime through conviction. Students will also be introduced to the role and function of emergency medical technicians and discover appropriate response for ensuring protection and minimizing hazardous situations. This is the first course in a series of three that will provide students with the necessary foundation and skills to continue advanced study in college or enter the workplace in the field of Law Enforcement and Public Safety. Students may earn college credit at Atlantic Cape Community College after successful completion of this course.



TERRORISM & HOMELAND SECURITY (Grades 11-12)

Course Code #952

5 Credits

Prerequisite: Introduction to Criminal Justice

Welcome to the world of Crime Scene Investigation (CSI). Photographs, fingerprints, DNA, blood splatter analysis, and other evidence that can be collected, processed, preserved and analyzed from a crime scene will be covered in this second year of the LE & PS curriculum. In addition to learning the aspects of a CSI Investigator, students will also study the role of a Major Crimes Detective and learn interview and interrogation techniques, the preparation and execution of search warrants, surveillance techniques and court room testimony.

The course is also designed to provide the student with an overview of terrorism. This course will define the term and provide a historical over view of terrorism, identify known or suspected domestic and international terrorist groups, identify significant terrorism incidents, and recognize federal, state, county and municipal law enforcement and intelligence organizations involved in the investigation and prevention of terrorist related acts. The year will conclude with an overview of the corrections and juvenile justice systems. Students may earn college credit at Atlantic Cape Community College after successful completion of this course.



LAW ENFORCEMENT & PUBLIC SAFETY III (Grade 12)

Course Code #951

5 Credits

Prerequisite: Terrorism & Homeland Security and teacher recommendation.

During the third and final year of the Law Enforcement and Public Safety Program, students will explore five career pathways (Security and Protective Services, Correction Services, Emergency and Fire Management Services, Law Enforcement Services, and Legal Services). A culminating project will give students an opportunity to demonstrate foundation skills learned in previous coursework, and knowledge learned in a chosen pathway. This course is for the student who is serious about a career in Law Enforcement and Public Safety.

Certifications will also be offered in Boating Safety, 9-1-1 Dispatcher, and Special Law Enforcement Officer Class I. Additional fieldwork experience may also be available and/or required. Students may earn college credit at Atlantic Cape Community College after successful completion of this course.

WORLD LANGUAGE DEPARTMENT – COURSE DESCRIPTIONS

FRENCH I (Grades 9-11)

Course Code #400 5 Credits

The first-year course is an initiation to the French language. Listening, speaking, reading and writing will be drilled, with particular emphasis on speaking, listening comprehension, grammar and vocabulary. There will be some introduction to history and culture.

Suggested Sequel: French II

FRENCH II (Grades 9-12)

Course Code #401 5 Credits

Prerequisite: French I (with C or better)

The second level of French is a continuation of vocabulary development, grammar and more complicated sentence structure. The student will further develop his ability to understand, speak, read, and write French. History and culture will be presented in the foreign language, both written and oral.

Suggested Sequel: French III

HONORS FRENCH III – (Grades 10-12)

Course Code #402 5 Credits

Prerequisites: French II (with B average)

This course is a continuation of French II. It emphasizes the communicative approach to grammatical principles and vocabulary through their use in discussion, understanding, composition, writing, and reading. A review of French I and French II is incorporated into the introduction of new grammatical structures. The customs and civilization of France and French speaking countries are brought into focus by reading, class discussion, and use of audio-visual aids. Emphasis is placed on the students' ability to communicate both orally and in writing. Students may earn college credits at Atlantic Cape Community College after successful completion of this course.

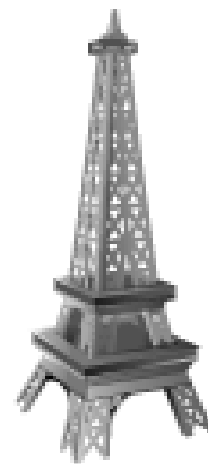
Suggested Sequel: French IV

HONORS FRENCH IV (Grades 11-12)

Course Code #396 5 Credits

Prerequisite: French III (with B average)

This course is a continuation of French studies with and increased emphasis on reading, writing and speaking. It is designed to give superior French students an advanced vocabulary and grammar curriculum. Students will read several short stories, including informational text. Students may earn college credits at Atlantic Cape Community College after successful completion of this course.



SPANISH I (Grades 9-11)

Course Code #405 5 Credits

This is an introductory course to the learning of the Spanish language. Strong emphasis is placed upon vocabulary, grammar, sentence structure, and conversation. The student is taught to listen, understand, speak, read and write Spanish. All teaching and learning are at the introductory level.

Suggested Sequel: Spanish II

SPANISH II (Grades 9-12)

Course Code #406 5 Credits

Prerequisite: Spanish I (with C average), CB English, CB Math

Spanish II is a second-year course for the learning of the Spanish language. It continues to develop and to enrich the language proficiency of the Spanish II student. It concentrates upon expanding and using the ability to understand, speak, read and write Spanish. Strong emphasis is placed upon grammar, more complicated sentence structure, conversation, and the history of Spanish speaking people.

Suggested Sequel: Spanish III

SPANISH III – College Bound (Grades 10-12)

Course Code #407 5 Credits

Prerequisite: Spanish II (with B average)

Enrichment of skills learned in Spanish I and II, with readings of selected stories in Spanish. Emphasis is on speaking skills, study of the culture, and of noted people from Spain and Latin America.

Suggested Sequel: Spanish IV



SPANISH III – HONORS (Grades 11-12)

Course Code #395 5 Credits

Prerequisite: With teacher’s recommendation.

A continuation of Spanish studies with increased emphasis on reading, writing, and speaking. This will be achieved by reviewing grammar and through the reading of short stories and novels. The history and geography of Spain will be studied as well as the biographical information of noted people from Spain and Latin America. A dual college credit option is available. Eligible students may apply through their instructor. Students may earn college credits at Cumberland Community College after successful completion of this course.



HONORS SPANISH IV (Grades 11-12)

Course Code #398 5 Credits

Prerequisite: Spanish III (with B average), CB English

Spanish IV is a fourth-year course for the learning and practice of the Spanish language. Strong emphasis is placed upon fluent conversation, writing and reading, word lists, and map study. History and geography of Spain and Latin America will be studied in detail. The literary aspect of this course will consist of a detailed analysis of several Spanish stories. A dual college credit option is available. Eligible students may apply through their instructor. Students may earn college credits at Atlantic Cape Community College or Cumberland Community College after successful completion of this course.

AP SPANISH LANGUAGE (Grades 11-12)

Course Code #399

5 Credits

Prerequisite: Spanish Level III or IV (with 90+ average) and/or recommendation from Spanish Level III or IV Teacher.

This course will provide academically talented and motivated students of Spanish with a college level course and the opportunity to practice the Spanish language in everyday situations. The course will require these students to take tests, write essays, work on projects and make oral presentations that will prepare them for the AP Test for Spanish.

Students in 12th grade are eligible to take the ACTFL Assessment of Performance toward Proficiency in Languages (AAPPL) assessment to test their proficiency and potentially earn the New Jersey Department of Education Seal of Biliteracy. The Seal of Biliteracy is an award given by a school, district, or state in recognition of students who have studied and attained proficiency in two or more languages by high school graduation. The Seal of Biliteracy encourages students to pursue biliteracy, honors the skills our students attain, and can be evidence of skills that are attractive to future employers and college admissions offices



ADDITIONAL ELECTIVES

FUTURE EDUCATORS (Grades 11-12)

Course Code #955

5 Credits

Prerequisites: 1) Minimum 3.0 (B average) GPA, 2) Application with teacher recommendations (signatures), 3) Essay

This course is designed for motivated students who would enjoy a challenging course on the role of the school in society. This course is designed to provide students with an in-depth look at the profession of teaching. Students study the growth and development of the learner, as well as the historical, social, political, philosophical, cultural, legal and economic forces that shape the American public school system. In addition, students complete a fifty-hour field experience in a school classroom. The curriculum consists of hands-on, interactive learning that incorporates inquiry, observation, community service, and field experience. This course will highlight areas of childhood development, learning styles, history of education, and culminate in practical classroom experience. Course themes include: experiencing the learner; experiencing the profession; and experiencing the classroom. Ideally and optionally, this course could be scheduled to coincide with a two period work study in another school district.

PEER LEADERSHIP (Grade 12)

Course Code #960

5 Credits

Prerequisites: Students must have demonstrated success in all academic areas since 9th grade, must have exemplary attendance and behavior history, and possess qualities of good character.

Candidates for this course will be required to participate in an application and selection process which will include but not be limited to sample writings, personal interview and group tasks.

This course will provide students with a complete knowledge of group dynamics. Students also will learn leadership and problem-solving skills and will have first-hand opportunities to utilize these skills when they lead small group discussions with freshmen.

ESPORTS (Grades 9-12)

Course Code: 2.5 Credits (semester course)

Esports is a course designed to prepare students for career readiness, life literacies, and key skills. It provides students with the necessary skills to make informed career and financial decisions, engage as responsible community members in a digital society, and to successfully meet the challenges and opportunities in an interconnected global economy. Units include: Introduction to gaming and Esports, team building and personal health, positive communication and interactions, careers in Esports, educational opportunities in Esports, and technology operation/maintenance.

DRONES AVIT140 sUAS Operation-Multi-Rotor (Grades 11-12)

Course Code #

2.5 Credits (semester course)

Prerequisites: Students must have demonstrated success in academics.

This course is designed to prepare students to operate a small-unmanned aircraft system (sUAS). Topics include but are not limited to the Code of Federal Regulations 14 part 107, airspace classifications, aeronautical chart reading, emergency procedures, conditions affecting flight, and aeronautical decision-making. This course requires a flight laboratory where students will operate a sUAS. The coursework also prepares students for the Federal Aviation Administration's Unmanned Aircraft Systems Knowledge Test. Upon successful completion of the test, students may be eligible to seek their FAA Remote Pilot Certificate with a Small Unmanned Aircraft Systems Rating.

SPECIAL EDUCATION

Lower Cape May Regional High School provides a continuum of program options for students with disabilities. Each special education student participates in the programs as outlined in his/her IEP.

- Supplementary aids and services may be provided in the general education classroom to enable students with disabilities to be educated to the maximum extent appropriate with nondisabled peers. These supports may be provided through consultation services by a certified teacher of students with disabilities and/or an instructional aide.
- Another program option in the general education classroom is an in-class resource program where the student is provided modifications to the instructional strategies by a certified special education teacher working with the general education teacher.
- Related services including, but not limited to, counseling, occupational therapy, physical therapy, school nurse services, and speech and language services are provided when specified in a student's IEP.

For students who require a resource room pull-out program or a special class program, course offerings include the following:

English	Grades 9 through 12
Math	Grades 9 through 12
World Cultures	Grade 9
U.S. History I	Grade 10
U.S. History II	Grade 11
Science	Grades 9 through 11

All special education Math classes use the scripted SRA curriculum. These include levels 1-6. The SRA Essentials of Algebra class is a two-year sequence. Math 5 is the first half of the book and Math 6 is the second half.

Support classes in English and Math are available for mainstreamed special education students at the 9th, 10th, 11th and 12th grade levels.

In addition to the courses listed above, there are courses that provide specially designed instruction using hands-on, experiential learning in Math and Science. These courses focus on skill development in the areas of: Running a Business, Entrepreneurial Skills, Workplace Readiness Skills, Accounting, Marketing, Cash Register, Interpersonal Skills, Social Skills and Problem Solving. Students in these courses will help run Caper Enterprises, the Bagel Shop, and the Greenhouse. Floral Design is a special education elective that is available for 11th and 12th grade students.

Another special class is Life Skills. There are four levels of Life Skills offered to special education students. These courses prepare students for tomorrow's workplace. They lead students through self-assessment and career exploration. Students will be given the opportunity to gain practical experience in careers of their choice.

CAREER INTERNSHIP PROGRAM

Purpose: To experience real life situations in the workplace; and to be able to come in contact with the latest technological advancements in the business world, health related fields, our complex legal system, areas of communications, management science, computer technology, and other related fields that students have an interest in exploring. One of the main functions of the internships is to place the students in the business and professional community to build a stronger partnership between the schools and our community, while at the same time giving our students an experience that will help them make valuable decisions about their future.

Selection Process: Seniors who have sufficient credits needed for graduation and have achieved a good attendance and citizenship record.

Acceptance into the program is contingent upon:

- Approval of application by a guidance counselor, job developer, and principal
- Satisfactory interview with the job developer
- Satisfactory interview and acceptance by the community sponsor
- Written permission from the intern's parents/guardians
- Signing an "agreement of responsibility" form
- Completion of an insurance statement

Credits will be determined by the number of hours the student participates. (1 hour per day = 5 credits)





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