

## UPPER SCHOOL ADMINISTRATION

Lynne Kenney<br>Upper School Director

Upper School Office Manager

Jessica Gaskill
Jamison Fee
Dean of Students

Justine Worthington
Director of College Counseling

Leigh Ann Hodges<br>Associate Director of College Counseling

Elizabeth Gibbs

School Counselor

## UPPER SCHOOL DEPARTMENT CHAIRS

Alexa Skelly<br>Fine Arts

Rachel Hatfield
World Languages

Julie Capps<br>Social Studies

Bobby Palmer
Math

Carr Fullager
Computing, Innovation and Design

Amanda Holliday
English

Keni Rienks
Science

## CAPE FEAR ACADEMY

CFA believes strongly in the value of every student and maintains high expectations for each student's success that are guided by our four Core Principles:

## COMMUNITY • ACADEMIC EXCELLENCE • CHARACTER • OPPORTUNITY

Cape Fear Academy believes that strength of character is essential to success. We foster good decision making, interacting with others with compassion and empathy, tackling challenges with optimism and diligence, delivering on commitments, and taking responsibility for actions.

## STATEMENT OF HONOR

The Cape Fear Academy standard is that each student will live as a responsible person, one whose word is his or her bond, whose work is always his or her own, and around whom the well-being and property of others is safe.

## Graduation Requirements and Recommendations:

| Subject | Minimum Required | Additional Details | Recommended |
| :---: | :---: | :---: | :---: |
| English | 4 credits | English in every semester, each year | 4 credits |
| Math | 4 credits | Math in each grade 9-12 | 4 credits |
| Science | 3 credits | Must include Biology, Chemistry, and Physics | 4 credits |
| Social Studies | 3 credits | Must include Civics, World History, and US History | 4 credits |
| World Language | 2 credits | Must be two consecutive years of the same language | 4 credits |
| Fine Arts | 1 credit | Can be met by a combination of semester and/or year-long classes | $1+$ credit(s) |
| Electives | 5 credits | Can be met by a combination of semester and/or year-long classes | 5 credits |
| P.E. | 1 credit | Minimum can be met by participating in 3 seasons of an Upper School sport or a combination thereof | 1 credit |
| TOTAL | 23 credits |  | 26+ credits |

$26+$ credits include a PE credit, online courses, and additional elective courses.

- MATH: Please note that public universities and colleges in North Carolina require an additional math course beyond Algebra II. Once the student meets the minimum requirement, courses will be considered an elective, including academic core elective courses. Please refer to the semester and year electives in each departmental section.
- WORLD LANGUAGE: Please note that a student who has completed 1 or more credits of a World Language before grade 9 must still complete 2 consecutive years of a World Language in the Upper School.

These requirements prepare students to attend many selective colleges and universities. A student must complete 23 credits in grades 9-12 and should carry 6 courses per year. Students will be assigned six courses unless scheduling conflicts or prior approval is received from the College Counselors and the Upper School Director. A scheduling waiver must be signed by a parent, the student, the student's advisor, a college counselor, and Upper School Director to take four or more Advanced Placement courses during an academic year. CFA encourages a healthy balance of academics, athletics, and the arts. Placement into AP classes is contingent upon meeting a grade prerequisite set for each class as well as a teacher recommendation. All AP students are required to complete the AP exam in order to earn the AP grade weight in their GPA."

Additional requirements include:
32 units of community engagement (4 units per semester/8 units per year at CFA)

## AP Courses Offered at CFA :

## AP CAPSTONE

AP Seminar
AP Research
ARTS
AP Music Theory*
AP Art and Design

## ENGLISH

AP English Language \& Composition
AP English Literature \& Composition

## HISTORY \& SOCIAL SCIENCES

AP Human Geography
AP Macroeconomics*
AP Microeconomics*
AP Psychology
AP U.S. Government \& Politics
AP U.S. History
AP World History

## WORLD LANGUAGES

AP Chinese Language and Culture
AP Spanish Language and Culture
AP Spanish Literature and Culture

## STEM

AP Biology
AP Calculus AB
AP Calculus AB/BC
AP Chemistry*
AP Computer Science Principles
AP Computer Science A/Javascript
AP Environmental Science
AP Physics C (Mechanics)
AP Statistics
*Offered every other year

1. Seniors receive first priority in scheduling.
2. Students must meet the listed class requirements at the time of class registration.
3. College Counselors are available for requested conferences.
4. Drop-Add Policy: Students are required to meet with the teacher of the course as well as a College Counselor and the Upper School Director before making any course changes once the academic year has begun. Students may add or drop either a 1 st semester or year-long course without penalty by Friday, September 9, 2022. The grade from the dropped course will not transfer to the added course; however, assignments may be expected to be made-up per teacher's discretion. The second semester add/drop deadline is Friday, January 20, 2023. Students choosing to drop a course after the Drop/ Add date will receive a "Withdraw Passing/Failing" notation for the dropped course on their transcript depending on their current grade at the time of withdrawal.
5. All CFA courses are college preparatory. Please note, the baseline minimum GPA for admission into any UNC-System school is 2.5 .

## Quick Links to Course Sections

AP Capstone<br>Computing, Innovation, and Design<br>English<br>Fine Arts<br>Music<br>Physical Education<br>Mathematics<br>Science<br>Social Studies<br>World Languages<br>CFA Engineering Certificate Program<br>Learning Beyond the Classroom: Online Courses<br>Learning Beyond the Classroom: Independent Study

2022-2023 Course Offerings

| ENGLISH | MATH | WORLD LANGUAGES | ARTS \& PE + <br> +Students take 1 year of On-level Arts electives prior to Honors enrollment. <br> Honors classes need teacher approval. |
| :---: | :---: | :---: | :---: |
| English 9 (On-level/ Honors) <br> *Recommended grade for Honors: 90 in English 8 | Algebra 1 | Mandarin Chinese 1 | Band (On-level/ Honors) |
| English 10 (On-level/ Honors) *Recommended grade for Honors: 90 in Eng. 9 or 86 in H English 9 | Geometry* <br> *Required: Algebra 1 | Mandarin Chinese 2* <br> *Required: Mandarin 1 or $\geq 80$ in MS Mandarin 6 \& 7 | Vocal Ensemble (On-level/ Honors) |
| Fall: Eng 11/12: Art \& Science (1 Semester) | Honors Geometry* <br> *Required: 85 in H Alg1, 93 in Alg1 | Honors Mandarin Chinese 3* <br> *Required: Mandarin 2 or $\geq 80$ in MS Mandarin 8 | Adv. Topics in Music Composition *Teacher approval required |
| Fall: Eng 11/12: Signs of the Times: 21st Century Literature ( 1 Semester) | Algebra II* <br> *Required: Geometry | Honors Mandarin Chinese 4* <br> *Required: Honors Mandarin 3 | Acting \& Directing <br> (On-level/ Honors) (1 or 2 Semesters) |
| Spring: Eng 11/12: Speaking Up: Literacy and the Power of Voice (1 Semester) | Honors Algebra II* <br> *Required: 85 in H Geo, 93 in Geo | Honors Mandarin Chinese 5* <br> *Required: Honors Mandarin 4 | ***Sewing \& Fashion Design (On-level/ Honors) (1 or 2 Semesters) |
| Spring: Eng 11/12: Truth \& Style: Writing for the 21st Century (1 Semester) | Adv Algebra and Trig* *Required: Alg2 | AP Chinese Language \& Culture* *Required: Honors Mandarin 5 | ***Technical Theater \& Design (On-level/ Honors) |
| AP English Language \& Composition* *Recommended grade: 90 in Eng. 10 or Eng. 11/12 or 86 in H English 10 | Discrete Math* <br> *Required: Adv. Alg \& Trig or H PreCal | Spanish 1 | Fall: Filmmaking (On-level/ Honors) <br> (1 Semester) |
| AP English Literature* <br> *Recommended grade: 86 in AP Eng. Lang. \& Comp. or 93 in English 11/12 | Honors Pre-Calculus* <br> *Required: 85 in H Alg2 or 90 in Adv. Alg\& Trig | Spanish 2* <br> *Required: Spanish 1 or $\geq 80$ in MS Spanish 6 \& 7 | Photography (On-level/ Honors) <br> (1 or 2 Semesters) |
| SCIENCE | ***AP Statistics* <br> *Required: 93 in H Alg2 or 90 in Adv. Alg \& Trig or 80 in H PreCalc | Honors Spanish 3* <br> ${ }^{*}$ Required: Spanish 2 or $\geq 80$ in MS Spanish 8 | Publications (On-level/ Honors) |
| Biology (On-level/ Honors) | \#AP Calculus AB* <br> *Required: 85 in H PreCalc | Honors Spanish 4* <br> *Required: Honors Spanish 3 | ***2-D Art Foundations (1 Semester) |
| Chemistry*(On-level/ Honors) <br> *Required for Honors - 77.5 in H Geo or 87.5 in Geo \& enrolled in Alg2 | \#AP Calculus AB \& BC* <br> **Required: 90 in $\mathbf{H}$ PreCalc | Advanced Topics in Spanish Conversation (1 or 2 Semesters) Fall and/or Spring *Required: Completed Honors Spanish 4 or higher | ***3-D Art Foundations (1 Semester) |
| **Introduction to Engineering \& Physics* <br> *Required: enrolled in Algebra 2 or higher | SOCIAL STUDIES | AP Spanish Language \& Culture* *Required: Honors Spanish 4 | Drawing \& Painting* <br> *Required: 2-D Art Foundations (1 Semester) |
| Fall: Marine Science (1 semester) | Civics \& Economics (On-level/ Honors) | AP Spanish Literature \& Culture* <br> *Required: AP Spanish Language | Ceramics \& Sculpture* <br> *Required: 3-D Art Foundations (1 Semester) |
| Fall:***Adv. Topics: Engineering Design* <br> (1 semester)*Required: Completed Intro to Engineering \& Physics | World History* <br> *Required: Civics \& Economics | COMPUTING, INNOVATION \& DESIGN+ +Students take 1 year of On-Level prior to Honors enrollment. | ***AP Art \& Design* <br> *Required: One or more semesters of Drawing \& Painting \& teacher approval |
| Spring: Anatomy and Physiology (1 semester) | AP World History* <br> *Required: 90 in H Civics \& Econ or 92.5 in Civics \& Econ | ***Robotics 1 \& 2 (1 Semester each) | Fitness \& Conditioning (1 or 2 Semesters) |
| Spring: **Adv. Topics: Electromagnetism \& Circuits* (1 Semester) *Required: enrolled or completed $H$ Physics or AP Physics C | US History* <br> *Required: Civics \& Economics and World History | Fall: ***Virtual Reality (1 Semester) | AP CAPSTONE \& OTHER |
| ***Adv. Topics in Physics: Coastal <br> Engineering* *Required: Completed Chemistry | AP US History* <br> *Required: 90 in WH or 80 in APWH | Spring: ***Web \& Digital Design (1 Semester) | ***AP Seminar* <br> *Required: Civ \& Econ |
| \#Honors Physics* <br> *Required: Enrolled in or completed Honor <br> PreCalculus or 93 in Adv Algebra and Trig | ***AP Macroeconomics* <br> *Recommended grade: 90 in WH or US or 80 APWH or APUS |  <br> Fabrication (1 or 2 Semesters) Fall and/or Spring | ***AP Research* <br> *Required: AP Seminar |
| ***AP Biology* <br> *Required: 90 in Biology or 83 in $\mathbf{H}$ Bio or $\mathbf{H}$ Chemistry | ***AP Human Geography* <br> *Recommended grade: 90 in WH or US or 80 APWH or APUS | ***AP Comp Science Principles | ***Independent Research Study In $\qquad$ <br> *Subject to teacher approval |
| ***AP Environmental Science* <br> *Required: 85 in Chemistry | AP Psychology* -Recommended grade: 90 in WH or US or 80 in APWH or APUS | ***AP Comp Science A* (Javascript) <br> *Required: AP Comp Science Principles | STUDY HALL |
| \#AP Physics C:Mechanics *Required: completed AP Calculus | AP US Government* <br> *Recommended grade: 90 in WH or US or 80 in APWH or APUS | ***Adv. Topics: App Development \& Cyber Security* <br> *Required: 90 in APCSA and APCSP and application for teacher approval required | \#Note: Either Honors Physics or AP Physics C is required for the Engineering Certificate Program. $A P$ Calc $A B$ or $A P$ Calc $A B / B C$ is required for the Advanced Eng. Cert.Program |

**Required for the Engineering Certificate Program ***Electives for the Engineering Certificate Program

## 2022-2023 Course Descriptions

AP CAPSTONE | AP Capstone is built on the foundation of a new, two-year upper school course sequence - AP Seminar and AP Research - and is designed to complement and enhance the in-depth, discipline-specific study provided through AP courses. It cultivates curious, independent, and collaborative scholars and prepares them to make logical evidence-based decisions. The AP Capstone courses combine scholarly practice with academic intensity. AP Capstone was developed in response to feedback from institutions of higher education. The two AP Capstone courses, with their associated performance tasks, assessments, and application of research methodology, complement the rigor of AP courses and exams by equipping students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

## Benefits of AP Capstone:

- Fosters the research, argumentation, and communication skills that are at the core of college readiness and essential for lifelong learning.
- Provides a setting to build on the knowledge and rigorous coursework of AP in an interdisciplinary format.
- Offers students a unique opportunity to distinguish themselves to colleges and universities.
- Offers a flexible curricular content model with room for creativity and student input.
- Affords Cape Fear Academy the distinction of offering a rigorous, widely recognized diploma program.
- Helps identify students who are prepared to enter college with the research, writing, and collaboration skills necessary for successful college completion.
- Provides consistent, externally-validated measures of student ability.
- Demonstrates student research and writing abilities through a 5,000 -word scholarly research paper

AP Capstone Diploma | Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing receive the AP Capstone Diploma ${ }^{\mathrm{TM}}$. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams receive the AP Seminar and Research Certificate ${ }^{\mathrm{TM}}$. The award is also acknowledged on any AP score report that is sent to colleges after the award has been conferred.


## AP Seminar

Recommended Grade(s)
$10,11,12$
AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.
Requirements Civics \& Economics
Year course- $\mathbf{1 . 0 0}$ credit

## AP Research

Recommended Grade(s)
11, 12
AP 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 investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar 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 approximately 4000-5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense. All information provided by https://apcentral.collegeboard.org/courses/ap-capstone

COMPUTING, INNOVATION \& DESIGN | The Computing, Innovation, and Design Department provides students with the current tools, knowledge, and space necessary to enhance critical thinking, analytical decision making, and information gathering useful for academic success and personal growth as a 21 st century learner. Students take 1 year of on-level electives prior to honors enrollment.

| 9th Grade | 10th Grade | 11th Grade | 12th Grade |
| :---: | :---: | :---: | :---: |
| AP Computer Science Principles | AP Computer Science A/ Javascript | Advanced Topics:App Development \& Cyber Security | Advanced Topics:App Development Cyber Security |
| Robotics I | Robotics II |  |  |

Other Semester Electives<br>Web \& Digital Design<br>Entrepreneurship: Product Design and Fabrication<br>Virtual Reality

Robotics I (offered in Fall) $\quad$ Recommended Grade(s) 9, 10, 11, 12
This semester course can be taken multiple times and is tailored to fit the experience level of the individuals through tiered teams. The course will primarily utilize Vex Robotic Systems as students complete challenges individually and group tasks that show off advanced building and programming skills (Python and Java). Eventually students will also use Robotics systems to build more complicated structures and programming. Students of this level will be eligible to join the CFA US Robotics Competition team if interested.

## Requirements NA

Semester course- $\mathbf{5 0}$ credit

## Robotics II (offered in Spring) $\quad$ Recommended Grade(s) 9,10,11, 12

Robotics level 2 assumes that students have completed previous builds using any style of robotics, and the student understands basic block programming, or another programming language. The course will primarily utilize Vex Robotic Systems as students complete challenges individually and group tasks that show off advanced building and programming skills (Python and Java). Eventually students will also use Robotis systems to build more complicated structures and programming. Students of this level will be eligible to join the CFA US Robotics Competition team if interested.
Requirements Successful completion of Robotics Level 1

## Entrepreneurship: Product Design and Fabrication $\quad$ Recommended Grade(s) 9,10,11,12

Students in this course will complete one semester of product design using CAD, 3d printers, laser engraving, laser cutter, vinyl cutters, CNC routers, and more to create prototypes for product design. Once prototypes have been created in class students will learn the entrepreneurial steps needed to take that prototype and turn it into a business, as well as the steps to have their product manufactured and mass produced. By the end of the semester students will have created at least 3 unique product concepts utilizing different tools and design techniques and have the knowledge to one day use these skills to start their own business.

## Requirements NA

## Semester course- . 50 credit or full year 1 credit

Virtual Reality (offered in Fall)
Recommended Grade(s)
9, 10, 11, 12
CFA's Virtual reality course offers an introduction to the world of Virtual Reality and Augmented Reality through using advanced Oculus Rift equipment and learning to create VR content using Unity 3D. Projects will enlighten students to the opportunities for VR content not only in the gaming world, but also in education, training simulations, and many other business sectors. No prior programming is required, though it may be helpful.
Requirements NA
Semester course- $\mathbf{5 0}$ credit

In this course, students will learn graphic design techniques, web design and development using HTML, screen printing, and basics of cyber security. The course will also include Google Workspace training. Students will be trained in Google Slides, Docs, and Sheets. Students who complete this course will feel confident in digital design, computing, understanding website vulnerabilities, and possible solutions and prevention measures.
Requirements NA

## Semester course- $\mathbf{5 0}$ credit

## AP Computer Science Principles <br> Recommended Grade(s) <br> 9, 10, 11, 12

Computer science is everywhere, from our smartphones and video games to music, medicine, and much more. AP Computer Science Principles (AP CSP) can help you understand how computing and technology influence the world around you. Learn how to creatively address real-world issues while using the same tools and processes that artists, writers, computer scientists, and engineers use to bring ideas to life. If you have big ideas and an interest in using technology and creativity to realize those ideas and solve problems, AP CSP is for you.

## Requirements NA

## Year course - $\mathbf{1 . 0 0}$ credit

## AP Computer Science A/Javascript <br> Recommended Grade(s) <br> 10, 11, 12

This course is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities.

## Requirements Successful completion of AP CSP

Advanced Topics: App Development \& Cyber Security
Recommended Grade(s)
11, 12
This course is designed only for students that have successfully completed both AP CSP and AP CSA and have a high interest in pursuing computer science. Students will dive deeper into a specific field of computer science with the goal of producing a professional product by the end of the year. Throughout the year students will work with community leaders, mentors, and professionals in the field related to their chosen topic to develop their app, product, website, etc. In addition, students will learn more about the foundations for artificial intelligence and cybersecurity. Note: An application must be completed explaining the student's product idea before final approval can be given for this class. Requirements 90 in AP CSP and AP CSA \& required application

Year course - $\mathbf{1 . 0 0}$ credit

ENGLISH | The Upper School English Department at Cape Fear Academy strives to provide students with the skills they need to be effective thinkers and communicators in our modern world. By centering our curriculum around essential questions that we all face in our lives, students are encouraged to form real text to self, text to text, and text to world connections. Students learn how to make these connections by reading critically, speaking effectively, and by writing fluently.

## English Department Core Curriculum (4 credits required)



This course is designed to introduce students to literature on a high school level by utilizing a variety of texts. Beyond written texts, students learn to think critically about media, popular culture, and other forms of communication. In addition, students learn how to write in response to multiple rhetorical situations and plan and compose effective argumentative, analysis, and evaluative essays. Class discussion is an integral part of the course; students are expected to participate every day both informally and through formal structures like debates and seminars. Students will refine close-reading skills and build a stronger vocabulary to move beyond the literal meaning of texts and increase the complexity of their analysis.
Requirement: completion of English 8

## Year course- 1.00 credit

## Honors English 9

Recommended Grade(s)
9
This course is designed to introduce students to literature on a high school level by utilizing a variety of texts. Beyond written texts, students learn to think critically about media, popular culture, and other forms of communication. In addition, students learn how to write in response to multiple rhetorical situations and plan and compose effective argumentative, analysis, and evaluative essays. Class discussion is an integral part of the course; students are expected to participate every day both informally and through formal structures like debates and seminars. Students will refine close-reading skills and build a stronger vocabulary to move beyond the literal meaning of texts and increase the complexity of their analysis. Students will be expected to work with a greater degree of independence as they build skills needed for success in AP English courses in $11^{\text {th }}$ and $12^{\text {th }}$ grades.
Recommendation: 90 or higher in English 8

## Year course- 1.00 credit

English 10
Recommended Grade(s)
10
More than only the study of language, English 10 is a thinking and communications course. By centering our study around essential questions that we all face in our lives, students are encouraged to form real text to self, text to text, and text to world connections. We will focus on learning how to communicate these connections and ideas effectively while writing and speaking. By reading texts ranging from the ancient world to modern day, students must learn to find the reading strategy that works for them whether reading a brief article or a more difficult piece. A large focus of the course is also becoming a strong close reader by developing an understanding of how tone and language affect thematic understanding. Students will also develop a greater word and syntax awareness by building a cumulative vocabulary list throughout the year and by learning to recognize and avoid common sentence errors. To help prepare students for the demands of the 21 st century world, this course will also emphasize strong collaboration and the effective use of technology.
Requirements: NA
Year course- $\mathbf{1 . 0 0}$ credit

## Honors English 10

## Recommended Grade(s)

10
More than only the study of language, Honors English 10 is a thinking and communications course. By centering our study around essential questions that we all face in our lives, students are encouraged to form real text to self, text to text, and text to world connections. We will focus on learning how to communicate these connections and ideas effectively while writing and speaking. Though similar in approach to English 10, honors students will also read several additional - and often more challenging - texts and be required to move at a more rapid pace. Honors students are also expected to be capable of more individual responsibility in balancing the demands of work outside of class. By reading texts ranging from the ancient world to modern day, students must learn to find the reading strategy that works for them whether reading a brief article or a more difficult piece. A large focus of the course is also becoming a strong close reader by developing an understanding of how tone and language affect thematic understanding. Students will also develop a greater word and syntax awareness by building a cumulative vocabulary list throughout the year and by learning to recognize and avoid common sentence errors. To help prepare students for the demands of the $21^{\text {st }}$ century world, this course will also emphasize strong collaboration and the effective use of technology. Students pursuing honors level work will strive to more complexly and effectively master all of these skills to prepare them for AP level work in $11^{\text {th }}$ and $12^{\text {th }}$ grade.
Recommendation: 86 or higher in Honors English 9, 90 or higher in English Year course- $\mathbf{1 . 0 0}$ credit

## NOTE : Students in 11th and 12th grade not enrolling in an AP English course will select from the English 11/12 semester courses below to meet their English requirement. Students will take a different course each semester.

Art and science are more closely related than we may often realize: they share a precision of detail, a commitment to uncovering the truth, and a desire to move humanity forward. This class offers the opportunity to think about ideas like the limits (if there are any) of science, the ways that technology has impacted human society, how individuals are shaped by scientific breakthroughs, and so on. We will examine a variety of text genres from science fiction to dystopian to non-fiction. In addition, we'll look at how scientific principles can inspire painting, poetry, song, and other forms of artistic expression. 11th and 12th graders may enroll in this course as part of their English 11/12 requirement OR as an elective course. 10th graders may take as an elective course with teacher permission.

## Requirements NA

Semester course: $\mathbf{0 . 5 0}$ credit
English 11/12: Signs of our Times: Literature in the 21st Century (offered in Fall) Recommended Grade(s) 11, 12
How does the literature of our own age reflect modern-day society's struggles, triumphs, and obsessions? What makes a text both high art and wildly popular? We will explore novels that have garnered critical acclaim and popular attention from the late 20th century to today. Through our study of contemporary novels, we will explore some of the most pressing issues facing our society today, such as climate change, immigration, and technology addiction. 11th and 12th graders may enroll in this course as part of their English 11/12 requirement OR as an elective course. 10th graders may take as an elective course with teacher permission.

English 11/12: Speaking Up: Literacy and the Power of Voice (offered in Spring) Recommended Grade(s) 11, 12
How do artists, writers, and speakers use their medium to advocate ways to fight injustice? How do writers and activists wield words as instruments for social change? This course will critically examine how literacy can empower all people while at the same time help students to cultivate the power of their own voice as speakers and writers. The course will examine a variety of genres ranging from art to poetry to music to memoir to fiction. 11th and 12th graders may enroll in this course as part of their English 11/12 requirement OR as an elective course. 10th graders may take as an elective course with teacher permission.
Requirements NA

## Semester course: $\mathbf{0 . 5 0}$ credit

English 11/12 Truth and Style: Writing for the 21st Century (offered in Spring) Recommended Grade(s) 11, 12
What does writing in the 21 st century reflect about the audience of readers in our modern-day society? What does the nature of our modern world demand from writers in terms of skill, voice, and style? This course will delve into writing for our digital era while closely examining how writing continues to evolve and grow as time and technology advances. Students will have the opportunity to write and read in multiple forms, considering purpose and building their voice and skills as we go. The course will be structured in a writing workshop format giving students opportunity to collaborate and learn from one another in the process as well as often choose their topics and areas to explore. 11th and 12th graders may enroll in this course as part of their English 11/12 requirement OR as an elective course. 10th graders may take as an elective course with teacher permission.

## Requirements NA

## Semester course: $\mathbf{0 . 5 0}$ credit

## AP Language and Composition <br> Recommended Grade(s)

## 11,12

The Advanced Placement Language and Composition course is designed to offer ambitious students a chance to access a college-level English class while still in high school. This unique course focuses primarily on the study of nonfiction works by American authors, including memoirs, essays, and articles from a variety of sources and time periods. Students will examine the writer's craft, examining structure, syntax, diction, tone, imagery and other rhetorical devices. By scrutinizing the methods authors use to write, as well as recognizing overarching patterns of thought (like archetypes, motifs, symbols, and themes), students will analyze writing from the perspective of the writer, rather than the reader. In addition to reading and verbal analysis, great emphasis is placed on writing cogently, concisely, and clearly, and students practice synthesis of different points of view and opinions in order to fashion their own arguments, thereby developing their own voices. Studies will include analysis of visual media and argumentation and persuasion, including logical Fallacies. Designed for students who possess self-motivation and maturity, AP Language prepares students to read widely, analyze with confidence, write in a variety of modes, and create, defend, and refute written, visual, and spoken arguments.
Recommendation: 86 or higher in H English 10, 90 or higher in English 10 or English 11/12 Year course - $\mathbf{1 . 0 0}$ credit

## AP Literature and Composition $\quad$ Recommended Grade(s) 12

The Advanced Placement Literature and Composition course is designed to offer ambitious students a chance to access a college-level English class while still in high school. The course enables students, through close reading, to deepen their understanding of the way writers use language to provide both meaning and pleasure for their readers. Students will consider structure, style, and theme in a variety of works, as well as elements of figurative language, imagery, symbolism, and tone. AP Lit. requires reading works from a variety of genres and periods-from the $16^{\text {th }}$ to the $21^{\text {st }}$ century; thus students learn to consider historical and literary context and to gain comfort in approaching seemingly daunting literary passages. The course is arranged into units, each encompassed by an Essential Question, and each centered around two-three literary texts, to be supplemented with disciplinary texts. As we segue into real $21^{\text {st }}$-century learning, we will embrace both the technology heretofore unavailable to us and the project-based, student-centered practices that blend learning in the classroom with the world outside of the classroom. NOTE: A PSAT critical reading score of 55 or higher is recommended for success in this course.
Recommendation: 86 or higher in AP Language, 93 or higher in English 11/12 Year course- $\mathbf{1 . 0 0}$ credit

FINE ARTS | The Fine Arts Department gives students at Cape Fear Academy a chance to discover and refine a wide variety of artistic skills. Students have a wide range of performing art, visual art, and digital arts classes from which to choose, with honors and AP options available in many subjects. Whether a student is a beginner looking for an entry level experience, or advanced and looking for a more challenging curriculum, there are dozens of options in a variety of disciplines to suit most artistic needs. Students take 1 year of on-level Arts electives prior to honors enrollment; honors classes require teacher approval.

## Visual Arts



2-D Foundations
Recommended Grade(s)
9, 10, 11, 12
This course introduces students to basic techniques in drawing, painting, and printmaking while improving observation skills. The curriculum covers various mediums; pencil, charcoal, pastel, ink, marker, collage, acrylic paint, watercolor, and relief print. Emphasis will be placed on design and spatial illusion (depicting a three-dimensional form on a two-dimensional surface). The student will become acquainted with the elements of art (line, shape, form, texture, color, and space) and principles of design (pattern, rhythm, emphasis, movement, balance, contrast and unity) as they apply artwork.
Requirements NA

## Semester course- $\mathbf{5 0}$ credit

## 3-D Foundations <br> Recommended Grade(s) <br> 9, 10, 11,

12
This course introduces students to basic techniques in sculpture and ceramics. The curriculum explores clay, plaster, paper-mache, metal, wood, fiber, and found objects. Students will experience both additive and subtractive processes (building, casting, and carving). In ceramics, students will master basic hand-building techniques (pinch, coil, slab), and move on to simple wheel construction. They will experience all aspects of clay work from preparation of the clay to decorating and glazing. The student will become acquainted with the elements of art (line, shape, form, texture, color, and space) and principles of design (pattern, rhythm emphasis, movement, balance, contrast, and unity) as they apply to sculpture and ceramics.
Requirements NA

## Semester course- $\mathbf{5 0}$ credit

## Sculpture and Pottery

## Recommended Grade(s)

$9,10,11,12$
This class will provide an opportunity for students to continue their studies in three-dimensional mediums on a more advanced level. Under the guidance of the teacher, students will devote a minimum of three weeks to the potter's wheel and develop and complete six to eight projects. Students may take this class multiple semesters.
Requirements 3-D Art Foundations

## Semester course- $\mathbf{5 0}$ credit

## Drawing \& Painting

## Recommended Grade(s)

9, 10, 11, 12
This class will provide an opportunity for students to continue their studies in drawing and painting on a more advanced level. Under the guidance of the art teacher, students will develop and complete $6-8$ projects. Units of study include still life, portraiture, figures, perspective, landscape, and abstraction. Students may take this class multiple semesters.

## Requirements 2-D Art Foundations

## Semester course- $\mathbf{5 0}$ credit

## AP Art and Design: Drawing Concentration or 2-D Art and Design Concentration Recommended Grade(s) 11, 12

AP Art and Design is for highly motivated students who are seriously interested in the practical experience of art. It is a year-long course. Students are required to complete four assignments over the summer. The digital portfolio, consisting of 15 individual works, was developed and submitted along with five physical works to AP Central in early May. AP Art and Design is a college level course. As in any college level course, it is expected that students devote considerable time beyond the scheduled periods to keep pace with the assignments. Students are responsible for the upkeep, management, and digital documentation of their work. It is highly recommended that students complete a full range of high school art courses before considering the significantly more rigorous AP Art and Design. Students may earn college credit by scoring well on the portfolio assessment. The portfolio is assessed by AP Central on the quality and sophistication of the artwork itself. This course may be offered in alternating years.
Requirements Teacher approval; 2-D Art, Drawing and Painting (one or more semesters). Year course - $\mathbf{1 . 0 0}$ credit

## DIGITALARTS

## Filmmaking (Offered Fall) Recommended Grade(s) 10, 11, 12

Do you love movies and want to make your own films and videos? Then this new course is for you! Filmmaking class combines a love for film and the movie-making process in this practical course for the kinesthetic learner!! Through a series of hands-on projects teamed with the viewing of technically groundbreaking films, students will be immersed in both film studies and the practical production of their own movies and videos. The course will explore the structure of popular films and the visual elements required to tell a narrative story and how those cinematic elements and story ideas can be transferred into your own films and videos. We will examine the core ideas behind screenwriting,
camera operating, cinematography, lighting and editing and will produce an array of videos ranging from commercials, short films, music videos to movie trailers and documentaries. Students take 1 year of on-level Arts electives prior to honors enrollment; honors classes require teacher approval.
Requirements NA

## Semester course- $\mathbf{5 0}$ credit

## Photography

Recommended Grade(s)
9,
10, 11, 12
Photography class provides students with a practical overview of the fundamentals of digital photography. Coursework is conducted with basic digital cameras and Apple Photos editing software. Assessments will include photo assignments, critiques, the creation of a digital portfolio and work submitted to the US Art Show and the NC Scholastic Art Awards. Through a series of practical assignments and studying camera operation, composition, presentation and editing techniques, students will be encouraged to define their individual photography style throughout the semester. Students take 1 year of on-level Arts electives prior to honors enrollment; honors classes require teacher approval.

## Requirements NA

## Semester course- $\mathbf{5 0}$ credit

Publications

## Recommended Grade(s)

9, 10, 11, 12
Combining elements of graphics arts, writing, photography, and marketing. In Publications students work together to design, produce, finance, and maintain the school yearbook Shoreline and the Upper School newspaper The Hurricane. Students also create slide presentations and programs for various Upper School events. Students learn to apply journalistic standards of writing, design, and photography while using a variety of software such as Adobe Creative Suite, which includes Photoshop and InDesign. With individual roles that contribute to a team goal, students explore the nuances of team management, community relations, advertising and marketing, and production organization. Minimum expectations include good writing and computer skills, the ability to set and meet deadlines, a strong work ethic, and the ability to work independently and as a team member. Membership in Quill and Scroll, a national journalism organization, and attendance at the NC Scholastic Media Institute at UNC-Chapel Hill in June are encouraged. Students take 1 year of on-level Arts electives prior to honors enrollment; honors classes require teacher approval.

## Requirements NA

Year course- 1.00 credit

## MUSIC

## Band

## Recommended Grade(s)

 9,
## 10, 11, 12

Band is a performing wind ensemble open to $9^{\text {th }}-12^{\text {th }}$ grades with experience in woodwinds, brass, or percussion. Through the rehearsal/performance process, students will improve their musicianship skills and technical facility on their instruments, learning to contribute to the development and growth of the ensemble. This class may be repeated for credit. Major concert repertoire is not duplicated within a four-year period. Students take 1 year of on-level Arts electives prior to honors enrollment; honors classes require teacher approval. Requirements NA

## Semester course- . $\mathbf{5 0}$ credit

Upper School Vocal Ensemble
Recommended Grade(s)
9, 10, 11, 12
This group consists of the most accomplished singers in the school who meet every day to become proficient as singers who are also strong musicians. Admission is by audition or by special request of the director. The goal of the Upper School Vocal Ensemble is to enhance the abilities and talents of each student by learning to read music, sight-read in different keys, understand difficult rhythmic patterns, learn and perform music in varying styles and periods and in many different languages. The choral curriculum will focus on areas of healthy vocal technique, tone development, articulation, style, written and aural music theory, music history, timbre, tone color, elements of music, forms of music, a cappella music, and the interpretation and discrimination of music through the learning and performance of high quality choral literature. Honors Vocal Ensemble members may be chosen to attend All State Chorus, State Competitions, and be soloists in performances. All music performed will be memorized. Mandatory performances throughout the year include National Honor Society Inductions, The Annual Holiday Concert, assemblies, the Upper School Musical, the Spring Concert, Spring Cabaret Night, community performances, and Commencement. Students take 1 year of on-level Arts electives prior to honors enrollment; honors classes require teacher approval.
Requirements NA

## Year course - $\mathbf{1 . 0 0}$ credit

## Advanced Topics in Music Composition $\quad$ Recommended Grade(s) 9,10,11,12

Advanced Topics in Music Composition is open to any student with proficiency in some area of music, such as piano, voice, woodwinds, brass, keyboard, strings, and percussion. It is required to read at least one clef well to enter the course. Students will learn elements of music including intervals, major and minor scale construction, harmony, transportation, voicing, arranging and ear training. Music Theory Advanced Placement is not a required prerequisite, but is beneficial. Besides developing listening skills, students will gain fluency in reading musical notation and develop a strong foundation in music fundamentals, terminology and analysis. It is highly interactive and uses computer assisted technology, to help students learn to improve listening skills and to study the basics of composition utilizing Sibelius. Students will need to purchase and maintain a laptop with the Sibelius software installed. Instructor approval is required in order to take this course. This course may be offered in alternating years.
Requirements Teacher approval.

## Year course - $\mathbf{1 . 0 0}$ credit

## THEATER

Ever dreamed of being a movie star? A Broadway Star? Or maybe you have just heard how much everyone loves to be involved in the plays and musicals here at school or in town? Well, this is where it all begins. In Drama class, you will not only learn the basic techniques of acting, you get to explore many different performance opportunities through improv games, monologues, and scenes. You will also explore a critical understanding of dramatic theory, methods of play/script analysis, theater terminology and etiquette, stage directions, current events, and a comprehension of theater genres. Improvisation, and beginning scene work are used to introduce students to acting and character development. Incorporation of other art forms in theater also helps students gain an appreciation for: music, dance, and visual art. Theater Arts provides opportunities for students to develop skills in listening, memorization, public speaking, articulation, script writing, and quick thinking, as well as stage presence, movement, ensemble work, vocal and physical awareness, and aesthetic awareness culminating in periodic classroom performances. Additional coursework focuses on the exploration of the artist as a whole. These skills will directly enhance your experience and opportunities in the main stage productions, and are also useful in many other aspects of your life. Students take 1 year of on-level Arts electives prior to honors enrollment; honors classes require teacher approval.

## Requirements NA

Semester Course- $\mathbf{5 0}$ credit

Sewing and Fashion Design
Recommended Grades(s):
9, 10, 11, 12
This class offers students an introduction to the basics of sewing, both by hand and with a machine. Depending on the students' interest, the class can be focused to concentrate on costume design or pattern sewing. In the costume design focus, students will learn how to analyze and research garments appropriate for a production's period, character types, and physical stage considerations. Students will play an integral part in the costuming of the theater program productions by using the program's existing collection to refashion and alter garments as well as creating original pieces as needed. In the pattern sewing focus, students will learn how to read and alter patterns, explore fabric choices and notions and explore different areas of sewing (home decorating, fashion, craft). Both concentrations will display a project at the winter and or spring art show. Students take 1 year of on-level Arts electives prior to honors enrollment; honors classes require teacher approval.

## Requirements NA

## Semester or Year course- $\mathbf{5 0}$ credit or $\mathbf{1 . 0 0}$ credit

## Technical Theater and Design

## Recommended Grade(s)

9, 10, 11, 12
Want to help build a full-scale Broadway Musical? Or perhaps a 40-minute NCTC one-act play for competition? How about building an entire house on the stage or a 450-gallon swimming pool where the audience usually sits? Then this is the class for you! Technical Theater and Design gives students a clear understanding of the ins and outs of Tech Theater and Scenic Design, covering all the elements that help create Cape Fear Academy Theater Program's season! From Set Design and Construction, Drafting and Painting, Lighting and Sound Design through to Stage Management, Prop and Costume Building. Students design, build, and paint scenery and props for each of the six theater productions during the school year. Part shop class, part scenic design with elements of engineering and painting thrown in for good measure, a love for creating hands-on theater art is a must for this class! Students will be graded based on practical assignments and project-based tasks on a per show basis in addition to the successful completion of active participation with each of the theater productions throughout the year. Students take 1 year of on-level Arts electives prior to honors enrollment; honors classes require teacher approval.

## Requirements NA

Year Course - $\mathbf{1 . 0 0}$ credit

## PHYSICAL EDUCATION

## Weight Training, Fitness and Conditioning $\quad$ Recommended Grade(s) 9,10,11, 12

Physical Fitness is a key component in the development of a healthy lifestyle and the benefits of exercise to improve the physical, mental, and emotional state of a person. The aim of this course is to develop a commitment and respect for lifelong physical fitness and nutritional principles. Diverse activities and exercises are the focus areas of this course. The students will be able to apply the principles of training necessary to improve fitness. This course may be taken 1-2 semesters.

## Requirements NA

Semester course- $\mathbf{5 0}$ credit

## Independent Physical Education: Outside of CFA Athletics

1. The student must provide a written description of the physical activity and the participation hours per week for approval by the Director of Upper School by the end of the add/drop period for full year credit or the January add/drop for second semester credit.
2. The student must keep an activity/sport journal or record which includes a description of the activity with date(s), duration, and completion of the activity. Also include a picture (i.e., of completion of a marathon), a performance evaluation, or a certificate of the completed activity.
3. Each quarter the teacher or coach of the activity must sign off on completion of participation.
4. A blog each quarter must be written and handed in with the coach's signature to the Upper School Office by December 15th for first semester credit and by May 15 th for second semester credit.

Participation must be equivalent to 3 athletic seasons or 1 full credit of Fitness \& Weight Training (230+ minutes per week).

MATH | Cape Fear Academy has a world-class and rigorous Upper School mathematics curriculum that is designed to meet the needs of students at all ability levels. We have a curriculum that is focused on ensuring that our students are prepared for college math courses, AP courses, and the SAT. The four-year Math requirement takes students
through the required Algebra 1, Geometry, and Algebra 2 courses before exposing them to challenging mathematical electives including: Advanced Algebra and Trigonometry, Pre-calculus, AP Calculus AB and BC, and AP Statistics.


## Math Department Core Curriculum (4 credits required)

## Algebra I

## Recommended Grade(s)

9
This course is intended for students who have not taken Algebra I, or have had a year of algebra but are not ready to move on to Geometry or Algebra II. Fundamentals of Algebra will be stressed. Placement will be based upon test scores and previous course work for new students, and teacher recommendations for returning students.
Requirements Advanced Pre-Algebra

## Year course- 1.00 credit

## Geometry $\quad$ Recommended Grade(s) 9,10

In this course, Geometry and Algebra reinforce each other through multiple tie-ins. Inductive and deductive reasoning are introduced. Students progress gradually from informal arguments to more formal presentations of proof. Coordinate and transformational geometry are interwoven through the text. Triangle relationships, measuring in the plane and measuring in space are topics fully explored as well as reasoning and parallel lines, proving triangles congruent, working with quadrilaterals, similarity, right triangle trigonometry, and chords, secants, and tangents.
Requirements Algebra I

## Year course- 1.00 credit

Honors Geometry
Recommended Grade(s)
9, 10
This course covers the same material as described in Geometry. It goes into greater depth in each of the concept areas and follows a more rigorous pace. Applications to the physical and mathematical world are stressed.
Requirements 85 in Honors Algebra 1 or 93 in Algebra 1
Year course- 1.00 credit
Algebra II Recommended Grade(s) 10, 11
This course begins with a review of linear equations and inequalities, linear functions, and polynomials. Students will then study irrational and complex numbers, quadratics, polynomial functions, statistics and probability.

## Requirements Geometry

Year course- $\mathbf{1 . 0 0}$ credit
Honors Algebra II Recommended Grade(s) 9,10
This course covers the same material as described in Algebra II. The course goes into greater depth in each of the concept areas and follows a more rigorous pace. Additional topics that are covered include matrices and conics.
Requirements 85 in Honors Geometry or 93 in Geometry
Year course- 1.00 credit
*Honors Algebra II can be taken in 9th grade with Honors Geometry for students who qualify. A 93 or higher in Honors Algebra 1 is required and an ERB score above the $65^{\text {th }}$ percentile for independent schools.

## Advanced Algebra and Trigonometry

## Recommended Grade(s)

11, 12
This course begins with a review of Algebra concepts, followed by an in-depth analysis of functions, their graphs, and their inverses, including linear, polynomial, exponential, and logarithmic functions. Students will then be exposed to a thorough examination of Trigonometry. They will learn to manipulate the basic trigonometric functions and identities to solve a variety of "real world" problems. They will also study the graphs of the trigonometric functions. Honors credit is not available.
Requirements Algebra II
Year course- 1.00 credit

## Discrete Mathematics <br> Recommended Grade(s) <br> 11, 12

Discrete Mathematics introduces students to the mathematics of networks, social choice, and decision-making. The course focuses on applications of matrix arithmetic and probability. Applications and modeling are central to this course of study. Appropriate technology, from manipulatives to calculators and application software, will be used regularly for instruction and assessment. Honors credit is not available.
Requirements Advanced Algebra and Trigonometry or Pre-Calculus Year course- $\mathbf{1 . 0 0}$ credit

## Honors Pre-Calculus Recommended Grade(s) 11,12

This course begins with an in-depth analysis of advanced Algebra concepts. Students will then study trigonometry including applications, graphs, function analysis, equations, identities, and solving geometric problems. The course also introduces an array of broad topics including: sequences, series, vectors, parametric equations, polar equations, limits and continuity. Students receive honors credit for the course.
Requirements 85 in Honors Algebra II or 90 in Adv Algebra and Trig Year course- $\mathbf{1 . 0 0}$ credit
AP Calculus AB Recommended Grade(s) 11, 12

The Advanced Placement course in Calculus adheres to the stated purpose of the College Entrance Examination Board. The program enables students to earn college-level credit in math while still in high school. It also provides students with the experience of college-type instruction in terms of materials, methods and expectations. The course covers broad topics, including elementary functions, differential calculus and integral calculus.
Requirements 85 in H Pre-Calculus
Year course- 1.00 credit

AP Calculus AB and BC Recommended Grade(s) 11,12
This combination will allow students to take AP Calculus AB first semester as a block semester class and AP Calculus BC second semester as a block semester class. Students will take the AP Calculus BC exam in May and will receive an AB subscore and a BC score for the exam which may allow them to earn college-level credit for Calculus 1 and Calculus 2.

## Requirements 90 in H Pre-Calculus

2 Semesters- 2.00 credits


#### Abstract

AP Statistics $\quad$ Recommended Grade(s) 11, 12


The Advanced Placement course in statistics adheres to the stated purpose of the College Entrance Examination Board. The program enables students to earn college-level credit in math while still in high school. It also provides students with the experience of college-type instruction in terms of materials, methods and expectations. Finally, it gives students an introductory, non-calculus based course in statistics. The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: 1) exploratory analysis, 2) planning a study, 3) probability, 4) statistical inference. Students in this course will observe patterns and departures from patterns, decide what to measure and how to measure it, produce models using probability and simulation and confirm models through inference from data.
Requirements 93 in Honors Algebra II, 90 in Advanced Algebra and Trigonometry, or 80 in H Pre-Calculus Year course- $\mathbf{1 . 0 0}$ credit

SCIENCE | The Cape Fear Academy Science Department aims to create knowledgeable and scientifically literate problem solvers. By fostering a spirit of inquiry, nurturing our students' curiosity, and bringing current, relevant and real-world science into the classroom experience, we prepare our students to become educated citizens capable of comprehending and analyzing scientific issues.

Science Department Core Curriculum (3 credits required) - Students are required to take Biology, Chemistry, and Physics. To meet the Physics requirement, students may take any of the following: Honors Physics, AP Physics C: Mechanics, Intro to Engineering and Physics, or Advanced Topics in Physics: Coastal Engineering.


Biology
Recommended Grade(s)
9
This is an introduction to biology for the high school student. The fundamental life processes and concepts common to all living organisms are emphasized in this course. We study life from the simplest molecules to the ecological interactions of large populations. Topics in this class include: biochemistry, cellular biology, genetics, evolution, plants, animals, and human anatomy and physiology. Lab work is an important part of this class.
Requirements Science 8

## Year course- 1.00 credit

## Honors Biology

## Recommended Grade(s)

9
The goals of this course are similar to the goals of biology. Biochemical processes in cells and the role of genetics in the continuity and evolution of life on earth are dealt with in greater depth. The diversity of adaptations of life from bacteria, protozoa, invertebrate, and vertebrates are discussed in terms of structure and function. Human anatomy and its interconnected organ systems are studied, as well as plant diversification and ecology. Independent reading expectations and vocabulary acquisition for this course are high.
Requirements Science 8

## Year course - $\mathbf{1 . 0 0}$ credit

## Chemistry

## Recommended Grade(s)

10, 11, 12
This is an introductory course in theories and concepts of modern chemistry. This course is designed to prepare students for college chemistry. The course emphasizes the atomic and molecular structure, chemical bonding, stoichiometry, properties of gasses, solutions, reaction rates and equilibrium, acid-base reactions, and chemical thermodynamics. The student will be introduced to quantum mechanics, and nuclear chemistry. The laboratory work will develop students' reasoning power, the ability to apply chemical principles, as well as acquaint students with chemical laboratory techniques.
Requirements Completed Biology and enrolled in Geometry

## Year course- 1.00 credit

## Honors Chemistry

## Recommended Grade(s)

10, 11, 12
The goals of Honors Chemistry are similar to the goals of Chemistry. However, a strong background in mathematics is essential. The pace of Honors Chemistry and the mathematical content is more rigorous. Laboratory activities play a vital role in reinforcing concepts with obtaining, evaluating, and manipulating data. To be enrolled in Honors Chemistry, students must be taking or have taken Algebra II.
Requirements 87.5 or higher in Geometry, $\mathbf{7 7 . 5}$ or higher in Honors Geometry, and enrolled in Algebra II Year course- $\mathbf{1 . 0 0}$ credit

## Honors Physics

## Recommended Grade(s)

11, 12
Honors Physics is an algebra-based, two-semester introductory college-level physics course using inquiry-based instructional strategies that focus on experiments, demonstrations, and a hands-on approach. Students will develop conceptual understanding and problem-solving skills. Topics covered include classical mechanics; orbital mechanics; simple harmonic motion, waves and sound; fluid mechanics, thermodynamics, electrostatics and electric circuits, linear optics, nuclear and modern physics topics. The laboratory programs provide students opportunities to stimulate intellectual curiosity and demonstrate critical and creative thinking based on foundational physics principles supported with physical models and engineering design. This course satisfies the physics requirement for the Engineering Certificate Program and meets the requirement for general physics.
Requirements Enrolled in or completed H Pre-Calculus or 93 in Adv Algebra and Trig Year Course- $\mathbf{1 . 0}$ credits

## Introduction to Engineering \& Physics $\quad$ Recommended Grade(s) 9,10,11,12

This course is designed for any student wishing to learn more about the field of engineering and some of the fundamental concepts from various engineering disciplines. A general knowledge of engineering and a number of design projects emphasizing teamwork, problem solving, and decision making in engineering design and physics principles will be incorporated throughout the course. The course will develop your knowledge of general physics and fundamental engineering skills to include computer aided design (CAD), mechanical drawing, the engineering design process, truss and joint analysis, engineering economics, and engineering ethics. Students will be required to present designs and projects using various communication techniques. This course is a required course for the Engineering Certificate Program and meets the requirement for General Physics.
Requirements Enrolled in Algebra 2 or higher

## Year course- 1.00 credit

## Advanced Topics in Physics: Coastal Engineering <br> Recommended Grade(s) <br> 11, 12

Students will gain an understanding of coastal systems, how they are affected by natural and accelerated climate changes, and problem-solving strategies and design for coastal resilience. Concepts of physical oceanography, climate science, and engineering will be taught through project-based learning. Students will also gain experience in collaborating with professionals in the Cape Fear region with the intent of gaining real world experience through partnerships. This course is entirely project-based, it will have no tests, and it meets the CFA General Physics requirement.
Requirements 83 or higher in H Chemistry or 90 in Chemistry

## Year course- 1.00 credit

## AP Biology Recommended Grade(s) 11, 12

The purpose of this course is to develop the student's knowledge and application of advanced biological concepts. This comprehensive study includes biochemistry, structure and function of cells, genetics, evolution, energy transformation, plant and animal (human) anatomy, physiology, behavior and/or response, ecology, and bioethics. The required laboratories have an experimental and quantitative format. This course will follow the Advanced Placement Biology guidelines. At the completion of the course, the student will take the AP exam. The student electing to take this course should be self-disciplined and should schedule additional time for extensive reading and research. Successful completion of Biology I and Chemistry are prerequisites. Students must have the approval of the AP Committee to enroll in this course. Students will also be required at times to use their study hall for lab work.
Requirements 83 or higher in H Biology or 90 in Biology
Year course- 1.00 credit

## AP Environmental Science <br> Recommended Grade(s) <br> 11, 12

This course is an interdisciplinary study of the interaction between human beings and their environment. It examines the effects of humanity on other living organisms as well as the nonliving factors of our planet by utilizing both philosophical and an investigative approach. Topics follow the AP College Board coursework and will include Ecosystems, Water Resources, Population, Soil/Agriculture, Atmosphere, Energy, Waste/Recycling, and Land Use. Students will be encouraged to "think globally, act locally" in learning how to serve our community, and, in turn, also serve our Earth. Requirements 88 or higher in Chemistry or Science elective Year course- $\mathbf{1 . 0 0}$ credit

## AP Physics C: Mechanics <br> Recommended Grade(s) <br> 11, 12

This course is equivalent to a year-long, calculus-based, college-level physics course that would support prerequisites for any college major in science, technology, and engineering. This course is designed, but not limited, to meet the demands of the AP Physics C (Mechanics) curriculum as published by the College Board. The course explores topics such as the kinematics and dynamics of motion; work, energy, and power; systems of particles and momentum; rotational kinematics and dynamics; oscillations; and gravitation. This course includes at least $25 \%$ of the instructional time spent on an integrated laboratory program with an emphasis on inquiry-based investigations. The laboratory program provides students opportunities to stimulate intellectual curiosity and demonstrate critical and creative thinking based on foundational physics principles supported with physical models. Introductory differential and integral calculus is used throughout the course and laboratory program. Students are expected to take the AP Physics C exam in May. This course may also be taken for math credit at CFA.

## Requirements Completion of AP Calculus AB or AP Calculus AB BC Year course- $\mathbf{1 . 0 0}$ credit

## Advanced Topics: Engineering Design

## Recommended Grade

12
Engineering Design builds on the knowledge and skills developed throughout the engineering certificate program using the engineering design process to design a solution for a client-based requirement. This fall-semester course will make use of engineering tools to include Computer Aided Design, 3D printing, mechanical drawings, experimentation, and fabrications to address a design proposal. As part of the engineering design process, students will consider social, political, economic, technical, environmental, legal, and ethical aspects of their design exploiting their CFA scholarly experience while conducting necessary research. The course culminates with a design proposal and prototype in a presentation to a client. This course satisfies the design requirement for the Engineering Certificate Program.
Requirements Completion of Introduction to Engineering \& Physics
Fall semester of 12th grade year - $\mathbf{0 . 5 0}$ credits or full year (with instructor approval) - $\mathbf{1 . 0}$ credit

Electromagnetism - the relationship between electricity and magnetism - is the underlying principle for the operation of electric motors, as well as generators, and transformers. Electromagnetism is all around us. Every time we turn on a switch, or we press a key on a keyboard, or we use any electrical device it is electromagnetism and circuits that make it work. Electromagnetism and circuits are foundational technologies that permeate nearly every engineering discipline. This course is an algebra-based, spring-semester only, introductory college-level physics course using inquiry-based instructional strategies that focus on experiments, demonstrations, and a hands-on approach. Topics include electrostatics, magnetic fields, electromagnetic induction, DC and AC circuits, and the electromagnetic properties of matter. The laboratory component is an introduction to electronics where students will develop skills in building, analyzing, and debugging electrical circuits. This course is required for the Engineering Certificate Program.
Requirements Completed or Enrolled in Honors Physics or AP Physics C (Mechanics)
Spring semester course- 0.50 credits
FALL: Marine Science
Recommended Grade(s)
$10,11,12$
This course is designed to study marine organisms and the interrelated processes within the marine environment. Geological, physical, and chemical, oceanography influence the biology and ecology of marine life. Hydrothermal vents, mid-oceanic ridges, beaches, marshes, waves, tides, salinity, pH , dissolved oxygen, etc. all affect the diversity of marine organisms on the "Blue Planet". The evolution and classification of marine invertebrates, vertebrates, and algae/seaweeds will be investigated. Students will be responsible for setting up and maintaining several salt-water aquariums. The positive and negative effects of human activity on our coastal environment will be examined by class discussions, construction of models and on field trips.
Requirements Biology and Completed or Enrolled in Chemistry

## SPRING: Human Anatomy and Physiology $\quad$ Recommended Grade(s) 10, 11, 12

Human anatomy and physiology is a course for sophomores, juniors and seniors who have taken biology. This is a one semester laboratory science course for students interested in studying the structure and function of the human body in detail. The subject matter examines most of the major body systems, including the circulatory system, the nervous system, the immune system, the skeletal system, the reproductive system, the endocrine system, the respiratory system, and the digestive system. Course activities include lectures, demonstrations, microscopic examination of human tissue, dissection of cats, and dissection of sheep hearts for the comparative study of the human body. Students will be expected to use proper laboratory skills in the handling of materials and equipment.
Requirements Biology
Semester course- $\mathbf{5 0}$ credit

SOCIAL STUDIES | The Upper School Social Studies Department at Cape Fear Academy seeks to provide students with the knowledge and skills they will need to become informed and involved citizens of their local, national, and global communities. The social studies curriculum is designed to promote collaboration and develop students' critical and creative thinking skills with attention to meeting the needs of diverse learners. An emphasis is placed on developing skills such as source analysis, the construction of an argument, oral expression, and responsible decision-making. The department's ultimate goal is to prepare students for the complexities of the world they live in by instilling in them an awareness, understanding, appreciation, and compassion for others.

Social Studies Department Core Curriculum (3 credits required)


## Civics and Economics

## Recommended Grade(s)

9
In this course, students will acquire the skills and knowledge needed to become responsible and effective citizens in an interdependent world. Students will examine the meaning of citizenship in the United States, as well as their role as global citizens. Basic political, legal, and electoral systems will be examined with a focus on the founding principles and documents of the U.S. system of government. This course will
also provide students with an understanding of basic economic principles to help them comprehend their role as consumers, and the role the United States plays in the global economy. Students will read, analyze, and discuss a variety of sources; be encouraged to think critically; and to make and defend decisions with clear reasoning and evidence. This course satisfies the government requirement for graduation.

## Requirements Social Studies 8

Year course- $\mathbf{1 . 0 0}$ credit

## Honors Civics and Economics

## Recommended Grade(s)

9
In this course, students will acquire the skills and knowledge needed to become responsible and effective citizens in an interdependent world. Students will examine the meaning of citizenship in the United States, as well as their role as global citizens. Basic political, legal, and electoral systems will be examined with a focus on the founding principles and documents of the U.S. system of government. This course will also provide students with an understanding of basic economic principles to help them comprehend their role as consumers, and the role the United States plays in the global economy. Students will read, analyze, and discuss a variety of sources; be encouraged to think critically; and to make and defend decisions with clear reasoning and evidence. This honors class places a heavy focus on critical reading and writing in the content area. This course satisfies the government requirement for graduation.
Requirements Social Studies 8
Year course - 1.00 credit

## World History <br> Recommended Grade(s)

This course is designed to help students develop a global perspective on the past by exploring the history of humanity. The course uses a thematic rather than a chronological approach. Organizing a history curriculum by theme allows students to explore a theme and how it develops over time rather than simply presenting history as a series of events that happened at the same time. Additionally, a thematic approach allows students to make stronger connections between the present and the past with the goal of increasing history's relevance to their daily lives. Thematic units include: Humans \& the Environment, Systems of Belief, Power \& Authority, Conflict, and Revolution \& Reform. Using this approach, an emphasis is placed on developing students' historical thinking skills and helping them gain a greater awareness of the commonalities that can be discovered through a study of the human experience. Students are required to take a course in World History in order to graduate.
Requirements Civics \& Economics

## Year course - 1.00 credit

AP World History $\quad$ Recommended Grade(s) 10
The Advanced Placement course provides students with a survey course on the history of the world. The primary intent of the AP World History course is to teach the history of the world from a truly global stance rather than from the dominant perspective of Western civilization. This approach therefore places emphasis on worldwide historical processes and connections among the whole gamut of human societies. The course is organized by five defining time periods, not by geographical areas and presents a survey of the major patterns seen globally in the past. Five themes are used to organize the vast amount of material included in the course and to help students make connections between one period and the next. These themes include: interaction between humans and the environment; development and interaction of cultures; state-building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures.
Requirements 93 in Civics \& Econ; or 90 in H Civics \& Econ Year course - $\mathbf{1 . 0 0}$ credit

## United States History

## Recommended Grade(s)

11
This course surveys the history of the United States from 1600 to the present. The course begins with the arrival of Europeans on the American continents and proceeds to the establishment of the colonies and their evolving democratic character. Then the American Revolution, the formation of a working federal government, the influence of the factory system and capitalism during the 1830's and 1840's, and the broad trends in United States history, which resulted in the Civil War are examined. Study of industrialization during the latter half of the nineteenth century and deepening involvement in overseas adventures, the upheaval of two world wars, and the economic miseries of the Depression give depth to our understanding of the present post-war period, including the Korean and Vietnam conflicts, Watergate, and the ensuing years of recovery. Students are required to take a course in U.S. History in order to graduate.
Requirements Civics \& Economics and World History
Year course- 1.00 credit
AP U.S. History $\quad$ Recommended Grade(s) 11
The Advanced Placement United States History course provides students with the skills and factual information necessary to assimilate information and the critical historical thinking skills that will prepare students to take the national examination in AP United States History and complete college level coursework. The course begins with the arrival of natives on the American continents and proceeds to the modern era. In this course, students will learn historical thinking skills, and develop their ability to critically analyze primary sources such as diaries, letters, speeches, political cartoons, tables, maps, and graphs. Course content and the related historical concepts are based on key themes: National Identity and Citizenship, America on the World Stage, Politics, and Power, Ideas, Beliefs and Culture, and Peopling. Students will also develop writing skills that will enable them to craft a variety of analytical and interpretive responses to document-based and free response questions on the national examination.
Requirements 80 in AP World History or 90 in World History
Year course - $\mathbf{1 . 0 0}$ credit

AP Macroeconomics and Financial Literacy

## Recommended Grade(s) *11,12

The AP Macroeconomics course will give students a thorough understanding of the principles of economics that apply to an economic system as a whole. This Advanced Placement course places emphasis on the study of national income and price-level determination, and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. This course will also extend students' understanding of these principles in the context of personal finance, exploring issues such as budgeting, credit, taxes, and investing. Development of financial literacy skills and an understanding of macroeconomic
principles will provide the basis for responsible citizenship, more effective participation in the workforce, and career success. Students will prepare for and take the AP Macroeconomics exam in May. *Registration priority will be given to 12th grade students who meet the recommended grade. This course may be offered in alternating years.
Recommended 80 in AP World or AP U.S. History; 90 in World or U.S. History Year course - $\mathbf{1 . 0 0}$ credit

## AP Human Geography $\quad$ Recommended Grade(s): *11, 12

The Advanced Placement Human Geography (APHG) course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. In addition, the course exposes students to economic theories and models, world religion, and the origins and diffusion of languages. Students study urban development, industrialization, and city planning and learn about the methods and tools geographers use in their science and practice. It is an excellent course for preparing students to become geo-literate and consider problems and solutions that the world faces in the 21 st Century. *Registration priority will be given to 12 th grade students who meet the recommended grade.This course may be offered in alternating years.

## Recommended: 80 in AP World or AP U.S. History; 90 in World or U.S. History Year course - $\mathbf{1 . 0 0}$ credit


#### Abstract

AP Psychology Recommended Grade(s) *11,12


The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. Topics covered in AP Psychology include the following: History and Approaches, Research Methods, Biological Bases of Behavior, Sensation and Perception, States of Consciousness, Learning, Cognition, Motivation and Emotion, Developmental Psychology, Personality, Testing and Individual Differences, Abnormal Behavior and its treatment, and Social Psychology. *Registration priority will be given to 12th grade students who meet the recommended grade. This course may be offered in alternating years.
Recommended 80 in AP World or AP U.S. History; 90 in World or U.S. History Year course - $\mathbf{1 . 0 0}$ credit

## AP U.S. Government and Politics $\quad$ Recommended Grade(s) *11, 12

AP U.S. Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behaviors. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. This course can be taken to meet the government requirement for graduation for those entering CFA after 10th grade. It is recommended that students complete a course in U.S. History before enrolling in this course. *Registration priority will be given to 12 th grade students who meet the recommended grade. This course may be offered in alternating years.
Recommended 80 in AP World History or AP U.S. History; or 90 in World or U.S. History Year course - 1.00 credit

WORLD LANGUAGES | The World Language Department at Cape Fear Academy provides students with the opportunity to develop both cultural and linguistic competence in the modern world languages of Spanish and Mandarin Chinese. Our talented instructors use a variety of teaching styles and methodologies to build target language proficiency within and to enhance the learning experience for the student. All world language courses at CFA fulfill a portion of the graduation requirements and provide an excellent foundation for continued study thereof.

## World Languages Department Core Curriculum (2 US credits required)



## Mandarin Chinese

## Mandarin Chinese I

Recommended Grade(s)
9, 10, 11, 12
Students will learn to read and write simplified Chinese characters (and pinyin) to gain a solid foundation of the Mandarin language.Through thematically organized units, students will build their vocabulary as well as learn grammar and expressions. By the culmination of the course, students will have attained beginner/novice level proficiency and fluency in all three modes of communication (interpersonal, interpretive, and presentational) in thematic topics. In Mandarin I, many interesting aspects of Chinese culture and history will be explored.
Requirements Entry level Mandarin or student does not meet the minimum requirement for Mandarin II
Year course- 1.00 credit

## Mandarin Chinese II $\quad$ Recommended Grade(s) 9,10,11,12

Mandarin Chinese 2 builds on the foundation of Mandarin 1. The course is designed to help learners continue to develop real-life communicative skills as they discuss topics related to everyday life such as shopping, transportation, weather, dining, and seeing a doctor. Vocabulary and language patterns are introduced, practiced and consolidated through a variety of communicative activities (such as role play dialogues, verbal presentations, and email responses) that target all modes of communication. Mandarin 2 also integrates rich opportunities for students to improve their cultural literacy and prepare them for successful communication and leadership in a global society..
Requirements Mandarin 1 or $\geq 80$ in MS Mandarin 6 or 7

## Year course- $\mathbf{1 . 0 0}$ credit

Honors Mandarin Chinese III $\quad$ Recommended Grade(s) 9,10,11,12
Success in this course relies heavily upon the solidity of the student's foundation built over three years of Mandarin learning in middle school or two years in the Upper School. Through thematically organized units, students will expand their vocabulary substantially as well as add new grammar and expressions to their repertoire. By the culmination of the course, students will have attained significantly higher proficiency and fluency in all three modes of communication (interpersonal, interpretive and presentational) in thematic topics. Through various intensive reading, writing, speaking and listening activities, students will have ample opportunity to strengthen what they learned in earlier levels while integrating new skills for greater meaning. Additionally, students will explore cultural topics as they relate to the themes of the course to build their cultural awareness and achieve global competence.
Requirements Mandarin 2 or $\geq 80$ in MS Mandarin 8

## Year course- 1.00 credit

## Honors Mandarin Chinese IV

Recommended Grade(s)
$10,11,12$
Students choosing to take this course should be highly committed to the studies of the Mandarin language and culture. This course will prepare students for higher level courses such as Honors Mandarin V and their lifelong pursuit of Mandarin learning in college and beyond. Students will continue to greatly enlarge their vocabulary and add to grammar repertoire through thematically organized units. Intensive practices of all modes of communication (interpersonal, interpretive and presentational) will be employed to build students' ability to integrate their linguistic skills and apply them in real life, meaningful contexts such as shopping, going to the doctor and reporting a traffic accident. In addition to communicative competence, this course will seek to build cultural awareness and global competence pertaining to the thematic topics in a deeper manner. Students are encouraged to participate in language and cultural activities beyond the classroom to broaden their knowledge and perspective of the Mandarin language and culture.

## Requirements Honors Mandarin 3

Honors Mandarin Chinese V

## Recommended Grade(s)

11, 12
The primary goal of this course is to help students improve and refine their Chinese language skills and prepare them for the AP Mandarin course next year. Students will gain the ability to create with language, based on previously learned materials when they discuss familiar
topics such as school, family life and part-time jobs. In Honors Mandarin Chinese V, students will continue to learn a large amount of new Chinese vocabulary and grammar, and achieve remarkably higher Chinese language proficiency by the end of this course. In each lesson, students will have many opportunities to practice and apply what they have learned through doing pair work with their peers, in-class grammar exercises and presentations. The course aims at improving students' communication skills in all three modes (interpersonal, interpretive and presentational) and expanding students' knowledge and awareness of Chinese culture and society. Chinese language and cultural activities will be held at school periodically. Students are encouraged to participate in order to deepen their understanding concerning the language and culture of China.
Requirements Honors Mandarin 4

## Year course - 1.00 credit

## AP Chinese Language and Culture

## Recommended Grade(s)

This course mainly targets students who wish to continue learning Chinese in college and beyond, and will prepare them for more advanced Chinese courses at the college level. While students continue to enlarge their repertoire of Chinese vocabulary and grammar, the topics for this course will focus on social issues such as economic development and environmental protection, science and technology, university, future career paths, etc. There will be a greater variety of class activities in this course and students will develop more sophisticated language skills, as well as achieve better fluency. By the end of this course, students should be able to read and discuss Chinese news articles, discuss social topics, and debate controversial issues in Chinese. Students will be exposed to authentic materials related to Chinese culture and society, through which they can gain a more profound understanding concerning these topics, and learn the Chinese language from different angles.
Requirements Honors Mandarin 5

## Year course - $\mathbf{1 . 0 0}$ credit

## Spanish

## Spanish I

Recommended Grade(s)
$9,10,11,12$
This course is designed for the novice learner with the aim of providing a strong foundation in the Spanish language for the continued study thereof. Vocabulary units have been carefully selected so that they may have both practical and real-life applications. The grammar presented in this course coincides with the chosen vocabulary themes and offers students the tools to begin communicating in Spanish both in speech and writing. Cultural and thematic material presented throughout the course will allow for students to explore, make connections with, and appreciate the variety of practices, products, and perspectives found throughout the Spanish-speaking world. Finally, coupled with exposure to a variety of authentic readings and multimedia selections, students will begin efforts to establish effective strategies for developing their reading and listening comprehension skills.
Requirements Entry level Spanish or student does not meet the minimum requirement for Spanish II

## Year course- 1.00 credit

## Spanish II

## Recommended Grade(s)

9, 10, 11, 12
This course is designed for the novice-mid to novice-high learner whose continued success will rely both on the solidity of the learner's foundation built in Spanish I as well as their continued motivation to learn the language. Vocabulary units have been carefully selected so that they may have both practical and real-life applications that expand upon earlier learning. As students build their vocabulary in this course, they will also be introduced to increasingly difficult grammar concepts, including but not limited to simple and imperfect past tenses. Together these will afford the students the ability to further express themselves in speech and writing to not only do so in the present time, but also in the past. Students will be encouraged to speak more Spanish as the percentage of Spanish they hear will also increase. Cultural and thematic material presented throughout the course will allow for students to explore, make connections with, and appreciate the variety of practices, products, and perspectives found throughout the Spanish-speaking world. Finally, with continued exposure to a variety of authentic readings and multimedia selections, students will resume their efforts to achieve competence in both reading and writing.
Requirements US Spanish 1 or $\geq 80$ in MS Spanish 6 and 7; New students: Placement test administered upon enrollment
Year course- $\mathbf{1 . 0 0}$ credit

## Honors Spanish III <br> Recommended Grade(s) <br> $9,10,11,12$

This course is designed for the intermediate-low learner whose continued success will rely both on the solidity of the learner's foundation built in Spanish I and II as well as their continued motivation to learn the language. Vocabulary units have been carefully selected so that they may have both practical and real-life applications that expand upon earlier learning. As students build their vocabulary in this course, they will also be introduced to increasingly difficult grammar concepts including but not limited to compound tenses such as the present perfect as well as complex structures like the present subjunctive. These higher level structures will afford the students the ability to further express themselves in speech and writing to include what they have done as well as offer opinions and recommendations as they relate to our thematic units. In this course, students will be encouraged to speak more Spanish as the percentage of Spanish they hear will also increase. Formal assessments will have more open-ended activities in order to focus on language proficiency. Finally, students are encouraged to expand their language use outside of the classroom by participating in broader, richer Spanish-speaking communities.
Requirements US Spanish 2 or $\geq 80$ in MS Spanish 8 ; New students: Placement test administered upon enrollment
Year course- $\mathbf{1 . 0 0}$ credit

## Honors Spanish IV Recommended Grade(s) $10,11,12$

This course is designed for the intermediate-mid learner whose continued success will rely both on the solidity of the learner's foundation built in Spanish I through III as well as their continued motivation to learn the language. In this course, students will participate in discussion topics, role-plays, interviews, oral presentations, and other communicative activities in which students can demonstrate what they have learned. In addition to oral skills, written communication skills are strengthened through an array of practical and creative writing tasks. Grammar points learned in earlier levels will be fine-tuned for the purpose of communication. Cultural and thematic material presented throughout the course will also allow for students to expand their cultural competence as they communicate/ Formal assessments will have more open-ended activities in order to focus on language proficiency. Finally, students are encouraged to expand their language use outside of
the classroom by participating in broader, richer Spanish-speaking communities. This course prepares students for the AP Spanish Language course.
Requirements Honors Spanish 3; New students: Placement test administered upon enrollment

## Year course- 1.00 credit

## AP Spanish Language and Culture

Recommended Grade(s)
11, 12
This course is designed for the intermediate-mid to intermediate-high learners whose continued success will rely both on the solidity of the learner's foundation built in Spanish I through IV. Students in this course should be passionate about Spanish and have a desire to continue their studies of the language and culture as a lifelong skill, as well as for preparation for college placement tests, college courses, extended study abroad, and beyond. Upon completion of this course, students are expected to take the AP exam. The AP Spanish Language and Culture course emphasizes communication (as defined as: understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. Although the course gives students the chance to review, fine tune, and expand the language skills they have developed over the previous four or more years of study, it shall strive not to overemphasize grammatical accuracy at the expense of communication. The course engages students in an exploration of a variety of AP identified themes: (1) families and communities, (2) science and technology, (3) beauty and aesthetics, (4) contemporary life, (5) global challenges, and (6) personal and public identities. Additionally, the course develops students' awareness and appreciation of cultural products (e.g. tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions) as they relate to the six aforementioned themes. With the use of authentic text, audio, and video sources, students will be exposed to a wealth of material for study and discussion all the while developing their own communication skills and demonstrating deeper understanding of culture. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish.
Requirements Honors Spanish 4; New students: Placement test administered upon enrollment

## Year course- 1.00 credit

## AP Spanish Literature and Culture

## Recommended Grade(s)

12
This course is designed for the intermediate-high learner whose continued success will rely both on the solidity of the learner's foundation built in Spanish I through AP Language. Students in this course should be passionate about Spanish and have a desire to continue their studies of the language and culture as a lifelong skill, as well as for preparation for college placement tests, college courses, extended study abroad, and beyond. Upon completion of this course, students are expected to take the AP exam. The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and Hispanic American literature, all ranging from medieval to contemporary times. Students develop proficiency across the full range of communicative modes (interpersonal, presentational, and interpretive), thereby honing their critical reading and analytical writing skills.Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings.The course also includes a strong focus on cultural connections and comparisons, including exploration of various media (e.g., art, film, articles, literary criticism). Students are assessed on works from the required reading list in both the interpretive and presentational modes of communication and students' ability to analyze literature in context.
Requirements AP Spanish Language \& Culture; New students: Placement test administered upon enrollment Year course - $\mathbf{1 . 0 0}$ credit

## Advanced Topics in Spanish Conversation $\quad$ Recommended Grade(s) 11,12

This course is appropriate for students who wish to continue building skills in speaking and writing. Through special topics of current interest to both the students and teacher, this course will provide vocabulary enrichment as well as opportunities to speak and write extensively in Spanish. Upon completion, students will be able to discuss selected topics, express ideas and opinions clearly, and engage in formal and informal conversations and written tasks. Knowledge of grammatical structures presented in Honors Spanish III and Honors IV is expected. Lectures, discussions, and reading and viewing materials for this course will be in Spanish.
Requirements Honors Spanish 4 or higher
Semester course- $\mathbf{5 0}$ credit or full year 1 credit

CFA is providing students the opportunity to consider the exciting world of engineering by creating an Engineering Certificate Program (ECP) and an Advanced Engineering Certificate Program (AECP).

Engineering Certificate Program ( 5 credits required)

| $9^{\text {th }}$ Grade | $10^{\text {th }}$ Grade | $11^{\text {th }}$ Grade | $12^{\text {th }}$ Grade |
| :---: | :---: | :---: | :---: |
|  |  | Honors Physics |  |
| Introduction to Engineering \& Physics <br> (Cannot be taken concurrently with Honors Physics or AP Physics C) |  |  | ADV Topics: <br> Electromagnetism and Circuits <br> (Spring Semester Only) |
| 2 credits of Engineering Electives from an approved List |  |  |  |
| Advanced Topics: Engineering Design (Fall Semester) |  |  |  |
|  |  | AP Seminar | AP Research |
|  |  | Independent Research |  |

Advanced Engineering Certificate Program (6 credits required)

| 9th Grade $\quad 10^{\text {th }}$ Grade | $11^{\text {th }}$ Grade | $12^{\text {th }}$ Grade |
| :---: | :---: | :---: |
|  | Honors Physics or AP Physics C |  |
| Introduction to Engineering \& Physics <br> (Cannot be taken concurrently with Honors Physics or AP Physics C) |  | Advanced Topics: Electromagnetism and Circuits <br> (Spring Semester Only) |
|  | AP Calculus AB or AP Calculus AB/BC |  |
| 2 credits of Engineering Electives from an approved List |  |  |
| Research \& Design Requirement (Choose 1 of 3 options) <br> Advanced Topics: Engineering Design (Fall Semester) |  |  |
|  | AP Seminar | AP Research |
|  | Independent Research |  |

1. To obtain a CFA Engineering Certificate or Advanced Engineering Certificate with your diploma a student must:

- Complete required courses with a B or better.
- Complete a minimum of 2 credits of Certificate Electives from an approved list maintaining a grade of $\mathbf{B}$ or better in each elective.
- Complete a semester-long (year-long is preferred) research and design project with a B or better.
- Maintain a professional electronic journal.
- Participate in an Experiential Activity and complete journal entries as appropriate.

2. Students are required to complete the following courses for the ECP and AECP:

- Introduction to Engineering \& Physics (1 credit)
- Honors Physics or AP Physics C (1 credit) Prerequisite: Introduction to Engineering \& Physics
- Advanced Topics: Electromagnetism and Circuits ( 0.5 credits Spring Semester only) Corequisite: Honors Physics or AP Physics C.

Students desiring the AECP must complete:

- AP Calculus AB or AP Calculus AB BC (1 credit)

3. Students are required to complete a research and design project. Students can achieve the requirement for research and design through one of three ways:
(1) Advanced Topics: Engineering Design ( 0.5 credits Fall Semester only). Prerequisite: Introduction to Engineering \& Physics
(2) Approved Independent Research with an advisor ( 0.5 to 1 credits)
(3) AP Seminar and AP Research courses (2 credits)

Any research and design credits beyond 0.5 credits can count toward the 2 credits of Engineering Electives.
4. Students are required to complete 2 credits of Engineering Electives from the following approved list.

| Math <br> - AP Statistics <br> Science <br> - Advanced Topics Physics: Coastal Engineering <br> - Botany <br> - AP Biology <br> - AP Chemistry | AP Seminar <br> AP Research (can be taken in lieu of Engineering Design Course) |
| :---: | :---: |
| Social Science \& Arts <br> - AP Human Geography <br> - Technical Theater and Design <br> - Sewing \& Fashion Design <br> - AP Economics <br> - AP Art \& Design <br> - 2D Art Foundations <br> - 3D Art Foundations | Computer Science <br> - Robotics 1 <br> - Robotics 2 <br> - Web \& Digital Design <br> - Entrepreneurship: Product Design \& Fabrication <br> - AP Computer Science A <br> - AP Computer Science Principles <br> - Virtual Reality <br> - Advanced Topics: APP Development \& Cyber Security |

Through a partnership with Stride which offers us the two different platforms of K-12 Private Academy and the Keystone School, CFA is able to offer students a variety of online courses including electives and World Languages in a number of curricular areas. For complete course listings, review the following: K-12 Private Academy Course List and Keystone Courses. In addition, students often choose to take courses through the Independent Study Program (high school) at Brigham Young University. If you are interested in pursuing online coursework, please contact online course mentor Ms. Clamme at bclamme@capefearacademy.org.

## More information about online courses:

- Students may not take an online course if it's one offered currently at CFA.
- Course costs are not included in CFA tuition, and the courses are an additional charge. Online course availability and pricing are subject to change.
- Online course letter grades will be retained as part of a student's permanent record.
- Online coursework counts toward academic credits but does not count toward the transcript GPAs.
- All online course requests must be approved by a College Counselor and Upper School Director.
- You will have a CFA online course mentor throughout the duration of the online course.
- Online semester courses must be completed in the semester they are taken with at least $50 \%$ of the course completed in the first quarter and the entire course completed one week before the end of Semester 1 or by April 30th for Semester 2.
- Online year-long courses must have at least $25 \%$ of the course completed each quarter and the entire course completed by April 30th.


## College admissions (in regards to online classwork):

Rigor is of utmost importance when colleges evaluate an applicant's transcript. Colleges and universities view courses in the following order of preference:

- Courses taught at the student's secondary institution (with honors and advanced placement providing the highest rigor that colleges seek).
- Courses taken through the university or community college.
- Courses taken through an online provider.


## Learning Beyond the Classroom - Independent Study

The Upper School Independent Study class offered each semester is an outgrowth of CFA's commitment to "discovering and developing individual potential" and developing a community of independent learners. The class allows students to independently drive a learning experience to engage in issues, collaborate with others in the field and teaches them to think critically, refine their research, writing, and communication skills. Students must complete the Independent Study Proposal form, which also can be found in the Upper School Office.

Some of the major requirements for the independent study are listed below, please see the independent study form for additional details.

- Proposal
- Three research papers written during the semester.
- An online blog or written journal kept for each week of the semester.
- Three formal oral presentations
- The end product will be presented either online or at an event so that the work is shared with the larger community.

