

A photograph of a pottery studio. In the foreground, a student with long blonde hair, wearing a red hoodie, is focused on shaping a piece of grey clay on a pottery wheel. Her hands are covered in clay. In the background, another student is working at a pottery wheel. The studio is filled with pottery wheels and various pottery-related items. The text "FOXCROFT ACADEMY COURSE GUIDE 2020-2021" is overlaid in white on a dark grey semi-transparent background.

FOXCROFT ACADEMY
COURSE GUIDE
2020-2021

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UPDATES IN 2020-2021

If you are already deeply familiar with the Foxcroft Academy academic program, the information in this section will help you to identify important changes for 2020-2021.

DOCUMENT

- Added: Appendix listing courses that meet Arts and STEAM requirements

ACADEMICS

- Updated: Graduation requirement for Mathematics

SUMMER SCHOOL

- Section removed. Summer School info to be released as supplement to Course Guide.

INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME

- No changes

ENGLISH LANGUAGE ARTS

- Added:
 - Topics in Classics CP: Contemporary Quagmires
 - Topics in Classics CP: Cinema As Literature
 - Topics in Classics CP: Graphic Novels
 - Topics in Classics CP: Animal, Vegetable, Mineral
 - Elements of Writing
 - English for Science, Medicine, and Research
 - Pre-TOK
- Removed:
 - Topics in Classics CP: Classics

- Topics in Classics CP: Nature in Literature
- Topics in Classics CP: Sports in literature and Modern Media

MATHEMATICS

- Added: Statistics and Statistics CP
- Removed:
 - Intro To Statistics
 - Algebra II (Graduation level)
- Updated:
 - Course Prerequisites
 - Graduation requirement statement

SCIENCE

- Added: standards for IB Biology and IB ESS
- Removed: Honors Biology

SOCIAL STUDIES

- Added: standards for IB History
- Removed:
 - AP US History
 - Topics: 20th Century Conflict
 - Contemporary Global Politics

WORLD LANGUAGE AND CULTURE

- Added:
 - Standards for IB WL courses

- Latin III: History and Culture
- Latin IV: Literature and Culture
- Removed:
 - Intermediate French Language and Culture through Film
 - Honors Latin III
 - Honors Latin IV
- Updated:
 - Course description for Intro to Spanish
 - Course description for Intro to French
 - Course descriptions for Intro to Latin, Latin I and Latin II

INDUSTRIAL TECHNOLOGY

- Minor edits to course descriptions

JOBS FOR MAINE'S GRADUATES (JMG)

- No changes

PERFORMING ARTS

- Updated: Course descriptions for IB Music SL and Jazz Band

VISUAL ARTS

- Updated: Course descriptions for Studio Art, AP Studio Art, and Intro to Airbrush

WELLNESS

- No changes

SPECIAL EDUCATION

- No changes

TRI-COUNTY TECHNICAL CENTER (TCTC)

- No changes

INTRODUCTION

Dear Students,

My intent in preparing this Course Guide is to provide you with a document that will be useful as we work together toward your graduation from Foxcroft Academy. As I hope is evident, our course offerings go far beyond what is required for graduation, and extend into many unique areas of interest. Our purpose in offering such a diverse set of learning opportunities relates directly to our mission to provide “a rigorous college and career preparatory academic curriculum designed to produce informed and active global citizens...with the underlying skills needed for post-secondary success”. All of us at Foxcroft Academy want your experience here to be a platform upon which you construct a happy and meaningful life, both personally and professionally.

Achieving success is more challenging than ever in the world today. Millions of your peers around the world, with whom you will collaborate to solve our many global challenges, will also compete with you for limited resources, not the least of which are jobs that pay a living wage. Our community, including day and boarding students from around the world, ensures opportunity to learn the skills of collaboration with people of diverse backgrounds. Our academic system prepares you to be competitive by requiring you to demonstrate proficiency in each standard. I am confident that all students are capable of earning our diploma, and that the knowledge you’ll gain along the way will fuel your ability to build a bright and rewarding future for yourself and for all of us.

If it sounds like I have high hopes and expectations, you’re right: I do. In fact, all of us here at Foxcroft Academy do, because we believe with passion that education serves as the engine of forward progress for individuals and societies. However inspirational that conviction may be, though, it is our shared efforts that will fuel the work. Education is not only an outcome, but also a process, driven by participation and steered by relationships. With a foundation of good communication and collaboration, your experience at Foxcroft Academy will be but a prelude to life-long learning, fulfillment, and success.

Sincerely,

Jonathan Pratt

Assistant Head of School for Academics

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Foxcroft Academy admits students of any race, color, gender, sexual orientation, gender identity, gender expression, religion, national or ethnic origin, physical or mental disability, genetic information or veteran status to all the rights, privileges, programs and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, gender, sexual orientation, gender identity, gender expression, religion, national or ethnic origin, physical or mental disability, genetic information or veteran status in the administration of its educational policies, admission policies, scholarship programs, athletic or other school administered programs.

Foxcroft Academy

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Dover Foxcroft, ME 04426

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ACADEMICS AT FOXCROFT ACADEMY

MISSION

Foxcroft Academy is an independent high school founded in 1823 on the principle that knowledge is power. Foxcroft Academy is committed to providing students from central Maine and beyond a rigorous college and career preparatory academic curriculum designed to produce informed and active global citizens. Foxcroft Academy will furnish all students with the underlying skills needed for post-secondary success while embracing its safe community and natural environment.

MISSION STANDARDS

To ensure that the academic program works toward fulfilling the mission of the school, the following cross-curricular mission standards (adopted from the Maine Learning Results, 2007) define the skills and abilities we intend students to be able to demonstrate upon graduation from Foxcroft Academy.

CLEAR AND EFFECTIVE COMMUNICATOR

Defined as one who understands the attributes and technique that positively impact constructing and conveying meaning for a variety of purposes and through a variety of modes.

SELF-DIRECTED AND LIFE-LONG LEARNER

Defined as one who understands the importance of embracing and nurturing a growth mindset.

CREATIVE AND PRACTICAL PROBLEM-SOLVER

Defined as one who is skilled at selecting and applying a process of problem-solving to deepen understanding and determine whether redefining the goal is a better way of addressing a problem situation and continuing to consider other alternative solutions until one resonates as the best one.

RESPONSIBLE AND INVOLVED CITIZEN

Defined as one who understands the interdependence within and across systems and brings to each situation the appropriate actions.

INTEGRATIVE AND INFORMED THINKER

Defined as one who is skilled at using complex reasoning processes to make meaning.

MISSION-DRIVEN ACADEMICS

The academic program at Foxcroft Academy is designed, implemented, and assessed in service to our mission. Our mission and mission standards serve to guide the specific courses that are required for graduation, and to influence the content standards embodied in those courses. Students will prepare a portfolio of coursework and other learning experiences that demonstrate proficiency in each mission standard in order to graduate, and students must meet expectations in each course standard in order to earn credit. While most course standards focus on subject-area content knowledge and skill, every course also includes a standard called “Academic Initiative” that holds students accountable to expectations for participation and engagement, appropriate use of technology, homework completion, timely completion of extended assignments, and independent utilization of available academic supports.

In our system, earning credit means that each course standard has been met, so that when the credits required for graduation are earned, the portfolio is completed successfully, and other requirements are met, the student has the characteristics of a Foxcroft Academy graduate, which in turn represent the academic components of the mission of our school.

Although individual course standards may change over time as a result of the constant inspection and evidence-based revision that is critical for the health of a standards-based system, the broad purpose of our proficiency-based approach remain constant: articulating the curriculum in detail and holding students accountable to meeting appropriately challenging expectations so that we can fulfill the mission of Foxcroft Academy. Given the novelty of the proficiency-based approach relative to the experience that many parents and other adults had in their own high school experience, it is very important for both students and parents to familiarize themselves with the details of our educational system.

Administrators, School Counselors, and Faculty are all happy to answer any questions that you might have along the way.

Further sections in this chapter of the Course Guide provide detail on our graduation requirements and how different courses and levels of study relate to career and college readiness. Information is also available in this chapter on the various ways that the experience at Foxcroft Academy can be customized to meet student needs and interests.

GRADUATION REQUIREMENTS

Earning a diploma from Foxcroft Academy requires attendance, demonstration of proficiency in mission and course standards, participation in the library reading program, and community service. Students must spend at least four full-time years studying at the secondary level. Students must demonstrate proficiency in each standard within a variety of required and elective courses, and in each mission standard through a portfolio. Students must participate in the library reading program at least once per year. Students must also perform and document a minimum of 36 hours of community service.

ACADEMIC LOAD REQUIREMENTS

Students are required to enroll in a minimum of six courses per year to maintain status as a full-time student. Our curriculum provides many opportunities for students to challenge themselves academically and experientially. Students are encouraged to push themselves beyond their current interests and skill levels by stretching their comfort zones in academic and co-curricular activities. Students are expected to be actively involved in building a demanding schedule for themselves that limits their open periods to no more than two per day per semester.

COURSE REQUIREMENTS

ENGLISH

English I and II, and at least one credit from a Topics in English course in both the junior and the senior year for a total of four credits

MATHEMATICS

3 credits, progressing through Algebra I, Geometry and either Algebra II or Statistics

SCIENCE

Physics, Chemistry, and Biology

SOCIAL STUDIES



Intro to Global Politics, American History A, American History B, and 1 Social Studies Elective

WORLD LANGUAGES

1 credit

WELLNESS

Health (0.5 credit), and 1 credit of Physical Education and/or Personal Fitness

ARTS



1 credit

STEAM ELECTIVES



2.0 Credits

ELECTIVES

3.5 credits

PORTFOLIO REQUIREMENT

Students will prepare a digital portfolio organized around the 5 mission standards. The portfolio affords students the opportunity to include diverse types of experiences, artifacts, and/or writings originating from diverse subject areas. The portfolio will include a minimum of one artifact for each of the five Mission Standards. Each artifact must be accompanied by a reflective document connecting it with one (or more) performance indicator(s) within the standard. A public presentation of an executive summary of the student portfolio will be required in late winter / early spring of the senior year.

LIBRARY READING REQUIREMENT

The Muriel Philpot Watson Library at Foxcroft Academy provides a vital resource supporting our mission and our academic standards, and the act of reading is integral to the fulfillment of that mission and those standards. Reading is a critical skill necessary for an informed citizenry ready for success beyond Foxcroft Academy, and students who choose a book beyond their coursework demonstrate the ability to be self-directed, lifelong learners and increase their ability to be integrative and informed thinkers. To that end, reading books obtained through the library is a graduation requirement.

All students must demonstrate that they have read at least one self-chosen book per year of enrollment at Foxcroft Academy, approved by the library staff and not part of a course assignment. The library’s collection includes a wide variety of books, and its staff will work with students to ensure that books selected to meet this requirement match the interests and reading levels of our diverse student body. Library staff will also work with students to ensure that books selected to meet this requirement are increasingly challenging, so that students demonstrate progress in their reading abilities during their time at the Academy. Students are responsible for working with the library, selecting and reading a book, then providing clear and effective communication in either written or presentational form that demonstrates sufficient comprehension of the text. Upon students’ successful completion of each book, the library will communicate with the Academics Office, which keeps the official record of library reading for all students.

COMMUNITY SERVICE REQUIREMENT

Foxcroft Academy believes that community service is a valuable educational experience and is integral to the fulfillment of the school’s mission for its students. As such, community service is a graduation requirement. All students in all grades must perform a minimum number of hours of community service each year, totaling at least 36 hours in order to graduate.

Community service experience teaches and models the importance of giving to others and community stewardship. Through community service students develop altruism and learn the benefit of hard work. Students may also become familiar with agencies and services in their region, and may be exposed to a variety of career and professional role models.

Community service is a requirement for many scholarships, and it can also be the deciding factor in decisions on college admission or getting hired for a job.

Counseling Services provides information about opportunities for community service. Students are responsible for contacting community service sites, following through with their commitments, and submitting proof of their service to their advisors. Advisors communicate the number of hours served to Counseling Services, who keeps the official record of service for all students.

Annual requirements:

Grade	Hours
9	6
10	8

Grade	Hours
11	10
12	12

A minimum of 36 hours of community service must be completed and reported in order to meet graduation requirements, with at least 12 of those hours served in the senior year.

CAREER AND COLLEGE READINESS

LEVELS OF STUDY

Foxcroft Academy recognizes that there are many pathways to career and college readiness, and that all students should plan their own unique experience along one of those paths. Pathway planning involves course selections as well as choosing a level of study. Levels progress from meeting foundational high school graduation requirements (no designation), to preparation for 2-4 year colleges (CP designation), to preparation for selective schools and programs (Honors and IB designation). Select AP courses are also available for students ready to take on the challenges of college-level work while still in high school. All students are encouraged to take the most challenging program in which they may succeed. Conferences with school counselors are strongly encouraged so that the student experience at Foxcroft Academy can be aligned with future goals.

ADVANCED PLACEMENT (AP®)

The AP program at Foxcroft Academy is a cooperative effort among highly motivated students, dedicated teachers, the College Board, and a host of post-secondary academic institutions around the world. AP courses are among the most challenging offerings at Foxcroft Academy, and allow our students to experience the rigors of college-level courses and exams. Success in AP classes can lead to success on AP Exams, which may garner the student college-level credit and/or improved status at their chosen college or university. AP exams are administered in early May, and participation in the examination is expected for all students enrolled in AP courses. Students who choose not to sit for an AP course exam (and/or those prohibited by the College Board) may not earn a grade higher than “C”. The cost of the AP exam is borne by the student (fee waivers from the College Board may be available for students who qualify).

Foxcroft Academy is approved by the College Board to offer the following AP courses: Calculus AB, Calculus BC, Chemistry, Macroeconomics, Microeconomics, Physics 1, Statistics, and Studio Art. AP courses are open to all appropriately-qualified students. Pre-

requisites for AP courses are identified in the course listings in the department through which it is offered, and specify the course(s), grade(s), and permission(s) that students may need to enroll. Students enrolled in AP course(s) are required to meet expectations on academic initiative standards (attendance, participation, homework, and extended assignments). After teacher intervention and attempts at remediation, failure to meet expectation on academic initiative standards may result in non-voluntary withdrawal from the course.

All AP courses are year-long; students are expected to commit to the full year of enrollment. Dropping an AP course may result in Withdraw-Fail status and a WF will be recorded on the transcript and impact the GPA. If applicable, senior privileges will be lost and the student will be required to contact all colleges to which s/he has applied in order to inform the admissions offices. Possible post-secondary repercussions of dropping an AP course could include an institution's withdrawal of an acceptance decision.

INTERNATIONAL BACCALAUREATE (IB®)

As of December 2018, Foxcroft Academy is an IB World School offering the Diploma Programme. Students in the Class of 2021 and beyond will have the opportunity to participate in the Diploma Programme. The educational philosophy underpinning the IB Diploma Programme aligns deeply with Foxcroft Academy's mission to provide students a rigorous curriculum that produces informed and active global citizens prepared for post-secondary success, and is recognized for its quality by colleges and universities around the world.

Core to the Diploma Programme are three learning experiences - a Theory of Knowledge course, development of a portfolio focused on Creativity, Activity, and Service, and authorship of a research-based and thesis-driven Extended Essay - along with six core academic courses that promote studies in/of language and literature, language acquisition, individuals and societies, science, mathematics, and the arts. Three core courses are offered at the Standard Level (SL) which requires a minimum of 150 hours of instruction, while the other three are offered at the Higher Level (HL) which requires a minimum of 240 hours of instruction. At least four of the core courses must span both the junior and senior year. Students must meet minimum expectations on required IB assessments in order to earn the IB Diploma. More information is available at <http://www.ibo.org>.

Though Foxcroft Academy encourages students to participate fully in the Diploma Programme, students may enroll in individual IB courses *a la carte*.

Foxcroft Academy IB Diploma Programme courses include:

- English Literature HL; Prerequisite: Successful completion of English II CP or Honors.
- Spanish and French *ab initio* (SL); Prerequisite: None, though prior exposure to the target language is recommended.
- History of the Americas HL; Prerequisite: Successful completion of Intro to Global Politics and American History A, CP or Honors.
- Biology HL; Prerequisite: Successful completion of Conceptual Physics and Chemistry, CP or Honors.
- Mathematics: Applications and Interpretation SL; Prerequisite: Successful completion of Algebra II CP or Honors.
- Music SL; Prerequisite still under research (some facility with sight-reading sheet music likely to be expected).
- Environmental Systems and Societies; Prerequisite: Successful completion of Conceptual Physics and Chemistry, CP or Honors.

*Offerings and prerequisites are subject to change.

Students and parents who are interested in learning more about the Diploma Programme and how to best prepare for it should contact Donna Newhouse, our Coordinator, by phone at 207-564-8351 or by email at donna.newhouse@foxcroftacademy.org.

PATHWAY RECOMMENDATIONS

The following table recommends both courses and levels of study for a variety of post-secondary plans.

	Career or Technical / Vocational / Community College	2-4 Year Liberal Arts College	Selective 4 Year Liberal Arts College
English Language Arts	English I, II, junior & senior English, preferably at CP level.	English I, II, junior & senior English, CP level or above.	English I, II, junior & senior English, Honors level, IB and/or AP recommended.
Mathematics	3 credits, progressing through Statistics or Algebra II at minimum, preferably at CP level.	4 credits, progressing beyond Algebra II, CP level or above.	Four credits at least through Pre-Calculus, Honors level, IB and/or AP recommended.
Science and Technology	Physics, Chemistry, and Biology at least one at CP level for lab science.	Physics, Chemistry and Biology, CP level or above.	Physics, Chemistry, and Biology, Honors level, IB and/or AP recommended.
Social Studies	Intro to Global Politics, American History A & B, and 1 SS Elective, preferably at CP level.	Intro to Global Politics, American History A & B, and 1 SS Elective, CP level or above.	Intro to Global Politics, American History A & B, and 1 or more SS Elective, Honors level, IB and/or AP recommended.
Wellness	Health, and 1 credit of Physical Education and/or Personal Fitness.		
Arts	1 credit required, more recommended, course selection depending on focus.		
World Languages	1 credit required.	At least 2 credits in the same language, more recommended.	At least 4 credits in the same language. Multiple languages recommended.
STEAM Electives	At least 2 credits, more recommended, course selection depending on focus.		
Electives	At least 3.5 credits, more recommended, course selection depending on focus.		
Community Service	At least 36 hours total, with at least 12 hours of service in senior year.	At least 36 hours total, with at least 12 hours of service in senior year. More recommended.	At least 36 hours total, with at least 12 hours of service in senior year. More strongly recommended.
Library Reading	At least 1 book per year, approved by library, with evidence of reading by report, presentation, or book club participation.		
Portfolio	At least one artifact and reflection document per standard, with executive summary presentation.		

CUSTOMIZED PROGRAMMING

INDEPENDENT STUDY

Students with interests beyond the regular curriculum are encouraged to ask a faculty member to oversee an Independent Study program. Independent Study programs are for the enrichment and extension of the regular curriculum and may not substitute for specific courses required for graduation. Students who wish to develop an Independent Study program may begin the process by completing the online Independent Study Contract form with the teacher who will guide their program. Independent Study programs must be approved in advance by the Assistant Head of School for Academics in order to be graded

and to receive credit if the student is successful. Proposals must include a curriculum and evaluation plan detailing the course's expected outcomes, alignment with standards, learning activities, rubrics and assessment instruments, assessment provider(s), and schedule for meetings.

OFF-CAMPUS STUDY

Due to the increasing expectations of post-secondary schools and employers, Foxcroft Academy requires four years of secondary-level enrollment for graduation. Off-campus study, if pre-approved by the Assistant Head of School for Academics, may substitute for a maximum of two specific courses required for graduation. Off-campus study must be facilitated through formal, accredited programs of demonstrated educational value, such as those provided by American Field Service (AFS), Upward Bound, Early College for ME, Virtual High School (VHS), and K12 Inc, among others. Students who wish to maintain enrollment at the Academy while participating in an off-campus program may submit a proposal to the Assistant Head of School for Academics.

WORK EXPERIENCE

Work release, work study, job shadows, and internships are educational opportunities available to 12th grade students in good academic standing. Eligibility is limited to those students who have made appropriate progress toward meeting graduation requirements by the end of their 11th grade year. Students can apply through Counseling Services. Final approval is granted by the Assistant Head of School for Academics. Work experience students must meet minimum enrollment requirements. Students are responsible for arranging their employment site, and employers must agree to provide periodic assessment and evaluation for work study and internship students.

ALTERNATIVE EDUCATION

Occasionally, students in special circumstances do not fit well with the usual requirements of Foxcroft Academy. Students in this situation may be offered alternative educational programming that better suits their particular needs or learning styles. Admission into the Alternative Education program is determined by a selection committee including faculty, counselors, and administrators. Alternative Education students meet the same proficiency-based learning objectives as regular education students and therefore remain eligible for a Foxcroft Academy diploma and for participation in Foxcroft Academy graduation events upon completion of requirements.

ACADEMIC SCHEDULING

Each year Foxcroft Academy re-builds the master academic schedule of courses in order to maximize fulfillment of student course requests. **As such, the major driving force influencing the quality of the academic schedule for a year is the quality of the course requests made by the students.** This Course Guide is the formal supporting resource for students to make high-quality course requests, because it helps students to understand graduation requirements, required and elective course options, and the prerequisites that must be fulfilled in order to enroll in some of those courses.

The academic scheduling process involves five major phases:

1. Curriculum Review
2. Course Requests
3. Sectioning
4. Build & Load
5. Personalization

CURRICULUM REVIEW

- Who: Academics Office, Departments
- When: November - January
- What: Department input on what to offer
 - Course descriptions
 - Standard descriptions
 - Pre-requisites
- Constraints: student & teacher interest, levels of study, learning outcomes, resources

COURSE REQUESTS

- Who: Academics Office, Counseling Services, Advisors, Students, Parents
- When: February - March

- What: input from students on needs/wants
 - PowerSchool registration screen setup
 - Copies of transcripts and graduation progress reports to students, facilitated review in advisory
 - Student entry of course requests, facilitated review in advisory and by parents
- Constraints: quality of requests, credit min/max, pre-reqs

SECTIONING

- Who: Academics Office, Departments
- When: March
- What: Department input on master schedule
 - Requests summarized and provided to departments
 - Evaluation of capacity to meet requests
 - Input on courses to schedule: section count, teacher, room, and timing
- Constraints: teacher load, class size needs/wants, semester/period needs/wants, instructional time, TCTC, student unknowns

BUILD & LOAD

- Who: Academics Office
- When: March - April
- What: place sections maximizing request fulfillment
 - Input sectioning info from departments into PowerSchool
 - Set course & student priorities
 - Place sections (build) & place students (load)
- Constraints: Common Planning Time, Co-Teaching, Rooms

PERSONALIZATION

- Who: Counseling Services
- When: May and *ad hoc*
- What: modification of individual schedules
 - Graduation requirement scheduling conflicts
 - Student-specific requests not fulfilled
 - Scheduling for new students (not involved in Phases 1 - 3)
- Constraints: individual needs, professional judgment, new students, course repeats

INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME

OVERVIEW

Foxcroft Academy is an IB World School offering the Diploma Programme. Students in the Class of 2021 and beyond have the opportunity to participate in the Diploma Programme. The educational philosophy underpinning the IB Diploma Programme aligns deeply with Foxcroft Academy's mission to provide students a rigorous curriculum that produces informed and active global citizens prepared for post-secondary success, and is recognized for its quality by colleges and universities around the world.

Core to the Diploma Programme are three learning experiences - a Theory of Knowledge course, development of a portfolio focused on Creativity, Activity, and Service, and authorship of a research-based and thesis-driven Extended Essay - along with six core academic courses that promote studies in/of language and literature, language acquisition, individuals and societies, science, mathematics, and the arts. Three core courses are offered at the Standard Level (SL) which requires a minimum of 150 hours of instruction, while the other three are offered at the Higher Level (HL) which requires a minimum of 240 hours of instruction. At least four of the core courses must span both the junior and senior year. Students must meet minimum expectations on required IB assessments in order to earn the IB Diploma. More information is available at <http://www.ibo.org>.

Students and parents who are interested in learning more about the Diploma Programme and how to best prepare for it should contact Donna Newhouse, our Coordinator, by phone at 207-564-8351 or by email at donna.newhouse@foxcroftacademy.org.

IB THEORY OF KNOWLEDGE IB001A

1.0 CREDIT HOURS / YEAR (2 YEAR COURSE)

Theory of Knowledge helps students learn to explore areas of knowledge through various ways of knowing. They cannot rely on only prior knowledge or their preconceived ideas about a subject. Imagination isn't just for art, and logic doesn't only apply to science and math.

Theory of knowledge is a course that asks students to think about *how* they know *what* they know. Students will critically think about how they gain knowledge, what counts as knowledge, and what role knowledge plays in the world. Students will explore Areas of

Knowledge, such as math, the natural sciences, the arts, history, and human sciences. Beyond *what* they know, students will be asked to think about *how* they know. The Ways of Knowing are how we construct knowledge, and students will think and reflect on different ways of gaining knowledge through sense perception, language, emotion, imagination, reason, memory, and intuition.

The course revolves around the construction and exploration of knowledge questions (questions and claims about knowledge). Students will draw on real life situations from their experiences and their courses to pose and answer questions about knowledge. Some examples of knowledge questions students may explore include: Should there be censorship of knowledge for the public good? What is the role of disagreement in the production of knowledge? In what ways do the arts influence people's perspectives of current events?

The two major assessments for this course are a presentation and an essay. In the presentation, students must choose a real life situation and develop a knowledge question from it, then apply that question to other real life situations. The IB provides prescribed titles (essay prompts) students must respond to for their essay. In these essays, students will be presented with a question or a scenario and under their understanding of areas of knowledge and ways of knowing to answer the prompt.

This course will challenge students to think differently and get outside their comfort zones.

PREREQUISITE

Status as a Diploma Programme student. Other juniors or seniors by permission.

GROUP 1: LANGUAGE AND LITERATURE COURSES

IB ENGLISH LANGUAGE AND LITERATURE HL IB146A

2.0 CREDIT HOURS / YEAR (2 YEAR COURSE)

Students may enroll in Year 1 independently of Year 2. Year 1 will meet the Foxcroft Academy graduation requirement of a junior- or senior-level Topics in English course. Students must have successfully completed Year 1 in order to continue in Year 2.

The Language A: Language and Literature course introduces the critical study and interpretation of written and spoken texts from a wide range of literary and non-literary genres. The formal analysis of texts is supplemented by awareness that meaning is not fixed but can change in respect to contexts of production and consumption.

The course is organized into four parts, each focussed on the study of either literary or non-literary texts. Together, the four parts of the course allow the student to explore the language A in question through its cultural development and use, its media forms and functions, and its literature. Students develop skills of literary and textual analysis, and also the ability to present their ideas effectively. A key aim is the development of critical literacy.

PREREQUISITE

Successful completion of English II CP or Honors, or Department Head approval.

GROUP 2: LANGUAGE ACQUISITION COURSES

IB FRENCH AB INITIO SL IB527

1.5 CREDIT HOURS / YEAR (2 YEAR COURSE)

Students may enroll in Year 1 independently of Year 2. Year 1 will meet the Foxcroft Academy graduation requirement of a World Language course. Students must have successfully completed Year 1 in order to continue in Year 2.

IB French *ab initio* is a two-year course that has been designed for students who don't have any prior experience learning the target language. The language *ab initio* course is arranged into three themes: Individual and Society, Leisure and Work, and Urban and Rural environment. Each theme has a list of topics that provide the students with opportunities to practice and explore the language as well as to develop intercultural understanding. Through the development of receptive, productive and interactive skills, students will be able to respond and interact appropriately in a defined range of everyday situations. In addition, students will organically learn to acquire basic grammar concepts.

The main focus of the course is on the acquisition of language required for purposes and situations usual in everyday social interactions. French *ab initio* aims to develop a variety of linguistic skills and a basic awareness of the culture. In addition, students will explore life in French-speaking countries through various media including clips from films, music, authentic texts, such as letters, articles and emails, as well as authentic resources from the internet.

PREREQUISITE

None, though prior exposure to French is recommended.

IB SPANISH AB INITIO SL IB539

1.5 CREDIT HOURS / YEAR (2 YEAR COURSE)

Students may enroll in Year 1 independently of Year 2. Year 1 will meet the Foxcroft Academy graduation requirement of a World Language course. Students must have successfully completed Year 1 in order to continue in Year 2.

IB Spanish *ab initio* is a two-year course that has been designed for students who don't have any prior experience of learning the target language. The language *ab initio* course is arranged into three themes: Individual and Society, Leisure and Work, and Urban and Rural environment. Each theme has a list of topics that provide the students with opportunities to practice and explore the language as well as to develop intercultural understanding. Through the development of receptive, productive and interactive skills, students would be able to respond and interact appropriately in a defined range of everyday situations. In addition, students will organically learn to acquire basic grammar concepts.

The main focus of the course is on the acquisition of language required for purposes and situations usual in everyday social interactions. Spanish *ab initio* aims to develop a variety of linguistic skills and a basic awareness of the culture. In addition, students will explore life in Spanish-speaking countries through various media including films, music, authentic texts and the internet such as letters, articles and emails.

PREREQUISITE

None, though prior exposure to Spanish is recommended.

GROUP 3: INDIVIDUALS AND SOCIETIES COURSES

IB HISTORY OF THE AMERICAS HL IB230A

2.0 CREDIT HOURS / YEAR (2 YEAR COURSE)

Students may enroll in Year 1 independently of Year 2. Year 1 will meet both the Foxcroft Academy graduation requirements for American History B and the Social Studies elective.

Year 1: "Causes and Effects of 20th-Century Warfare"

Year 1 of this course will center on the causes and consequences of 20th-century conflict. The 20th century was arguably the most violent in the history of man and the 21st century

continues to be shaped by it. There is much to be learned from these events and therefore it's worth understanding not only what caused these catastrophic events, but also the consequences of them.

Students may enroll in Year 2 independently of Year 1. Year 2 will meet the Foxcroft Academy graduation requirement for the Social Studies elective.

Year 2: "History of the United States"

Year 2 of this course will focus more on the history of the United States. This includes an in-depth study of slavery and the "new world", the American Civil War, and post-1945 social movements that include, but are not limited to, the civil rights movement and the modern feminist movement.

Both Year 1 and Year 2 sub-courses require students to complete a 2200-word research paper.

PREREQUISITE

Successful completion of Intro to Global Politics and American History A at the CP or Honors level.

GROUP 4: SCIENCES COURSES

IB BIOLOGY HL IB420

2.0 CREDIT HOURS / YEAR (2 YEAR COURSE)

Students may enroll in Year 1 independently of Year 2. Year 1 will meet the Foxcroft Academy graduation requirement of a Biology course. Students must have successfully completed Year 1 in order to continue in Year 2.

IB Biology is a rigorous, 2 year course occurring in the Diploma Program (DP) candidate's junior and senior year that meets internationally-recognized expectations of topics and learning outcomes in Biology. In addition to fulfilling the attributes of IB's Learner Profile (LP) and adopting IB's Approaches to Teaching and Learning (ATL), the ideal candidate for this class will display strong social and collaborative skills, a flexible growth mindset, and experience in laboratory science. Due to the complexity of scheduling and the order of topics, students wishing to receive Standard-Level (SL) credit must sit for the whole HL course, but will be assessed on SL topics only. The internal assessment (IA) for the course is

a laboratory report and students will also complete a Group IV project as part of their progress toward meeting DP requirements. The course cumulates with three Papers (exams issued by IB). Strong scores on these Papers may earn students college credit in Biology. This course is integrated with the other IB courses offered in the DP, including but not limited to topics in Theory of Knowledge (TOK), the Extended Essay (EE), and others. Non-DP students may also take this course, but are subject to essentially the same course expectations as DP students.

PREREQUISITE

Successful completion of Chemistry, and Physics at the Honors level, or teacher permission. A very strong performance in Chemistry, and Physics at the CP level may qualify students for IB placement.

IB ENVIRONMENTAL SYSTEMS AND SOCIETIES SL IB423

3.0 CREDIT HOURS (1 YEAR COURSE)

Through studying environmental systems and societies (ES&S) students will be provided with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face.

The teaching approach is such that students are allowed to evaluate the scientific, ethical and socio-political aspects of issues.

PREREQUISITE

Successful completion of Conceptual Physics and Chemistry at the CP or Honors level.

GROUP 5: MATHEMATICS COURSES

IB MATHEMATICS: APPLICATIONS AND INTERPRETATION SL IB345

1.5 CREDIT HOURS / YEAR (2 YEAR COURSE)

Students may enroll in Year 1 independently of Year 2. Year 1 will meet the Foxcroft Academy graduation requirement of a Mathematics course. Students must have successfully completed Year 1 in order to continue in Year 2.

Mathematics: Applications and Interpretation SL is appropriate for students who are interested in developing their mathematics for describing our world and solving practical problems. They will also be interested in harnessing the power of technology alongside exploring mathematical models. Students who take Mathematics: Applications and interpretation will be those who enjoy mathematics best when seen in a practical context. This subject is aimed at students who will go on to study subjects such as social sciences, natural sciences, statistics, business, some economics, psychology, and design, for example. This is a course that will meet every other day for two years.

PREREQUISITE

Successful completion of Algebra II, Placement Exam, or Department Head approval.

GROUP 6: THE ARTS COURSES

IB MUSIC SL IB956

3.0 CREDIT HOURS (1 YEAR COURSE)



IB Music Standard Level develops musicians' knowledge and ability through individually and collaboratively. Students are required to participate in Jazz Ensemble performing a variety of styles of instrumental music while studying musical cultures in depth from around the globe and throughout history. Theory, ear training, analysis, history and cultural impact will be studied to help develop the whole musician not just the instrumental ability. Student should learn how to express themselves, analyze and understand the music of others, grow confident in musical terms and techniques and understand how music and the arts changes from place to place and time to time.

PREREQUISITES

Band, Jazz Band and teacher permission.

DIPLOMA PROGRAMME STUDENTS WHO DO NOT MEET PREREQUISITES FOR MUSIC MUST ENROLL IN ENVIRONMENTAL SYSTEMS AND SOCIETIES.

ENGLISH LANGUAGE ARTS

GRADUATION REQUIREMENT

To graduate from Foxcroft Academy, students must earn credit in English I, English II, and in at least one Topics or AP English elective in both the junior and the senior year for a total of four credits.

SHARED COURSE STANDARDS

READING AND CULTURE (FA1.ENG.1)

Students will read, interpret, and analyze texts, connecting them to their own lives, other works, and the world around them.

- Connect a text to the context of its production and content.
- Interact with the text to support critical reading skills, including making predictions, connections, and identifying important aspects of the text.
- Analyze elements that are central to the text's meaning, such as character development, theme, symbolism, etc.
- Analyze how an author's choices and point of view contribute to the text's overall structure, meaning, and aesthetic impact.
- Demonstrate cultural literacy through knowledge of foundational works in literature and nonfiction.

WRITING AND EXPRESSION (FA1.ENG.2)

Students will clearly communicate complex ideas through a variety of means.

- Participate in discussions through listening and speaking for collaborative knowledge building.
- Express complex ideas through oral presentation, multimedia, writing, and discussion.
- Structure a work according to purpose or intent.
- Create coherent, thesis-driven arguments to support claims in an analysis of substantive topics or texts.
- Support arguments using sufficient and appropriate evidence.
- Develop and strengthen expression by planning, revising, editing, or trying a new approach.

ENGLISH CONVENTIONS (FA1.ENG.3)

Students will use appropriate grammar and vocabulary to communicate effectively within different contexts.

- Acquire and accurately use general and domain-specific words and phrases.
- Use context as a clue to determine the meaning of words and phrases.
- Differentiate modes of communication based on form and context.
- Generate works that conform to standard conventions.

RESEARCH AND CITATION PROCEDURES (FA1.ENG.4)

Students will find, evaluate, synthesize, and cite multiple sources to inform their work and ideas.

- Navigate informational systems to identify and evaluate credible sources.
- Make inferences drawn from the source, including determining where the source leaves matters uncertain.
- Integrate sources of information presented in different media or formats.
- Synthesize multiple sources and use citation in ways that demonstrate academic integrity and avoid plagiarism.
- Use discipline-specific forms of citation.

REQUIRED COURSES FOR GRADES 9 AND 10

ENGLISH I 112

1.0 CREDIT HOURS

This course is based on such writing standards as Writing and Expression, English Conventions, and Research and Citation Procedures, which are assessed through rough drafts, editing, revision of essays and creative writing. The standard of Reading and Culture is assessed through the study of the genres of fiction, nonfiction, and drama. All standards will be addressed each year and at each level. English I provides a basis for subsequent levels of English study and is intended for those students planning to enter the world of work or open enrollment post-secondary programs. The pace is geared to students who have traditionally found language arts to be a challenge.

PREREQUISITE

None.

ENGLISH I CP 111

1.0 CREDIT HOURS

This course is based on such writing standards as Writing and Expression, English Conventions, and Research and Citation Procedures, which are assessed through rough drafts, editing, revision of essays and creative writing. The standard of Reading and Culture

is assessed through the study of the genres of fiction, drama, and poetry. Authors included at this level range from Homer to Dickens, Shakespeare to Steinbeck, and Orwell to Cisneros. All standards will be addressed each year and at each level. CP English provides a basis for subsequent levels of English study and is intended for those students planning to attend a two or four-year college.

PREREQUISITE

None.

HONORS ENGLISH I 114

1.0 CREDIT HOURS

This course is based on such writing standards as Writing and Expression, English Conventions, and Research and Citation Procedures, which are assessed through rough drafts, editing, revision of essays and creative writing. The standard of Reading and Culture is assessed through the study of the genres of fiction, drama, and poetry. Authors included at this level range from Homer to Dickens, Shakespeare to Steinbeck, and Orwell to Cisneros. All standards will be addressed each year and at each level. Honors English lays a foundation for the Advanced Placement course offered in 12th grade and is reserved for those students who have demonstrated exceptionally strong language arts skills as determined by their performance toward meeting standards.

PREREQUISITE

None.

ENGLISH II 122

1.0 CREDIT HOURS

This year two course is based on such writing standards as Writing and Expression, English Conventions, and Research and Citation Procedures, which are assessed through rough drafts, editing, revision of essays and creative writing. The standard of Reading and Culture is assessed through the study of the genres of fiction, nonfiction, and drama. All standards will be addressed each year and at each level. English II provides a basis for subsequent levels of English study and is intended for those students planning to enter the world of work or open enrollment post-secondary programs. The pace of study is geared to students who have traditionally found language arts to be a challenge.

PREREQUISITE

Successful completion of English I.

ENGLISH II CP 121

1.0 CREDIT HOURS

This year two course is based on such writing standards as Writing and Expression, English Conventions, and Research and Citation Procedures, which are assessed through rough drafts, editing, revision of essays and creative writing. The standard of Reading and Culture is assessed through the study of the genres of fiction, drama, and poetry. Authors included at this level range from Shakespeare to Twain, Knowles to Bradbury, and Wordsworth to Cummings. All standards will be addressed each year and at each level. CP English provides a basis for subsequent levels of English study and is intended for those students planning to attend a two- or four-year college.

PREREQUISITE

Successful completion of English I.

HONORS ENGLISH II 123

1.0 CREDIT HOURS

This year two course is based on such writing standards as Writing and Expression, English Conventions, and Research and Citation Procedures, which are assessed through rough drafts, editing, revision of essays and creative writing. The standard of Reading and Culture is assessed through the study of the genres of fiction, drama, and poetry. Authors included at this level range from Sophocles and Shakespeare to Twain and Ionesco. All standards will be addressed each year and at each level. Honors English lays a foundation for the Advanced Placement course offered in 12th grade and is reserved for those students who have demonstrated exceptionally strong language arts skills as determined by past classroom performance in meeting the standards.

PREREQUISITE

Successful completion of English I (CP or Honors).

REQUIRED COURSES FOR GRADES 11 AND 12

Specific offerings may vary from year to year depending on student interest. All courses are based on such standards as Writing and Expression, English Conventions, and Research and Citation Procedures, which are assessed through rough drafts, editing, revision of essays and creative writing. The standard of Reading and Culture is assessed through the study of the genres of fiction, drama, and poetry.

TOPICS IN ENGLISH

Students choosing to study Topics in English at the graduation level will be assigned topics of study as determined by the teacher.

TOPICS IN ENGLISH CP: ANIMAL VEGETABLE MINERAL 156A

1.0 CREDIT HOURS

Food often appears in literature as a symbol, hunger as a metaphor. We all eat, but we don't always think about the connections this daily activity has to world issues such as ethical production, culture, history, gender roles, and even our own family and identity. This class will use food as our window into these larger topics and more. Course readings may include Barbara Kingsolver's *Animal, Vegetable, Mineral* and Michael Pollan's *The Omnivore's Dilemma*. Creative writing will also be a major focus. The memories and sensory images that food inspires will help us practice authentic and descriptive writing. No cooking knowledge required.

PREREQUISITE

Successful completion of English II.

TOPICS IN ENGLISH CP: APOCALYPTIC LITERATURE 139

1.0 CREDIT HOURS

This course will examine the history of the idea of the Apocalypse from ancient times to the present. We will start with Ancient Babylon's *The Epic of Gilgamesh* and the *Flood of Noah* from ancient Jewish scripture. We will then look at the text from which apocalyptic literature gets its name: *The Apocalypse of John* (also known as the *Book of Revelation*). From there we will study various concepts of the "end times" and the growth of apocalyptic literature with the rise of modern technology. Short stories by authors such as Stephen King and Ray Bradbury, as well as novels such as Cormac McCarthy's *The Road* will comprise the majority of reading

in this class. Writing for this class will be evaluated through online discussion posts and short papers.

PREREQUISITE

Successful completion of English II.

TOPICS IN ENGLISH CP: CINEMA AS LITERATURE 155A

1.0 CREDIT HOURS

Since their origins in the early 20th century, movies have become an important facet of human culture. Just as the myths, poetry, and novels that pervade our culture reflect various aspects of the human condition, movies explore and reflect who we are, and what it means to be human. Through this lens, this course will study a variety of films from the silent era through the contemporary period. Students will examine the use and effect of literary elements (such as characterization, setting, symbolism, etc.) as well as elements specific to film, such as cinematography, visual effects, and the editing process. Some attention will also be paid to screenplays and screenwriting, and the process of making a film from page to screen. Writings will be brief, frequent, and critical in nature.

PREREQUISITE

Successful completion of English II.

TOPICS IN ENGLISH CP: CONTEMPORARY QUAGMIRES 138A

1.0 CREDIT HOURS

The internet and modern technology have made it easy for us to learn what is happening across the globe. With one look at our phones, we can read about British politics and conflicts in the Middle East. But how much do we really know and *understand* about these contemporary quagmires? Students in this course will explore global issues by looking at how they are depicted in contemporary literature, film, and art.

PREREQUISITE:

Successful completion of English II.

TOPICS IN ENGLISH CP: DEATH AND OTHER FUN THINGS 136

1.0 CREDIT HOURS

This course explores the topic of death through various lenses - war, loss of freedom, “end times”, and loss of innocence through experience. Readings may include: *1984*; *Death of a Salesman*; *The Epic of Gilgamesh*; *The Road*; *The Things They Carried*.

PREREQUISITE

Successful completion of English II.

TOPICS IN ENGLISH CP: GRAPHIC NOVELS 136A

1.0 CREDIT HOURS

As our culture became more visually oriented over the course of the 20th century, graphic novels emerged as an innovative and distinct literary genre. This course will examine this genre through the study of a variety of graphic novels, including classic comic-book themed stories such as *Watchmen* and *The Dark Knight Returns* as well as more recent texts that transcend the comic book genre, such as *Maus*, *Persepolis*, and *The Infinite Horizon*. Attention will be paid to the use and effect of literary elements in these texts as well as their treatment of important aspects of society, including identity, race, ethnicity, and gender.

PREREQUISITE

Successful completion of English II.

TOPICS IN ENGLISH CP: IDENTITY AND SOCIETY 135

1.0 CREDIT HOURS

This course explores the defining qualities of and external influences on identity. Students will examine character identities and discuss the changes amidst diverse societal pressures. Readings may include: *The Scarlet Letter*; *Brave New World*; *Black and Blue*; *MacBeth*; *The Metamorphosis*.

PREREQUISITE

Successful completion of English II.

TOPICS IN ENGLISH CP: JOURNALISM IN THE 21ST CENTURY 157

1.0 CREDIT HOURS

This course will examine how the Digital Age has affected the journalism industry. Journalists used to have support staff including photographers, videographers, and editors. 21c journalists must now be able to perform all of these duties and more by themselves. From the incorporation of social media and visuals to the role of the citizen reporter, there has been a foundational shift in how news and information is shared around the world. Students will explore current events, reading articles and excerpts from a variety of sources including either *The Freedom Writers* or *The Things They Carried* to reflect upon digital storytelling, truth, and writing as a process. They will hear from current journalists (newspaper, TV, and magazine) and how the industry changes on a daily basis, as well as engage in writing and media exploration to share community news and personal stories. From hard news, politics, entertainment, slice of life stories and sports, it's all news that needs to be reported and edited in a different way. Students will learn these basics and much more over the course of the class.

PREREQUISITE

Successful completion of English II.

TOPICS IN ENGLISH CP: MYTHS, LEGENDS AND THEIR HEROES 158A

1.0 CREDIT HOURS

Literature, art, politics and religion find their earliest roots in the broad oral tradition of storytelling. Long before the Medieval bard, humans were drawn to stories of creation and adventure. Myths have served a variety of critical roles throughout our history. From memorializing historical events to explaining the bizarre natural world around us, we seek to understand the human condition through our myths. The class will explore a variety of cultures: from the traditional myths of Greece, Rome and Egypt to the folklores of Europe, Asia, Africa and the Americas (including our local Abenakis). The course will draw on a variety of anthologies, reimagined fairy tales and works of literature, such as the Aeneid, Grimm's Fairy Tales, The Legend of Sigurd and Grudún and Ichiro. Reading, research writing, creative writing and other forms of creative expression are integral to this course.

PREREQUISITE

Successful completion of English II.

INTERNATIONAL BACCALAUREATE COURSES

These courses are for students seeking to prepare for selective post-secondary study.

PRE-TOK IB146A

1.0 CREDIT HOURS

This course is an introduction to the kinds of meta-analysis required by IB's Theory of Knowledge class. As such, it affords students the possibility to begin examining their own thought processes, as well as socio-political factors impinging on those processes. This thinking about knowledge not only prepares students for the more rigorous traditional IB class, but supports students portfolio work, which is a requirement for graduation. Assessments will be based on in-class participation and several presentations throughout the class.

PREREQUISITE

None. Enrollment limited to students in Grade 9 or 10.

IB ENGLISH LANGUAGE AND LITERATURE HL IB146A

2.0 CREDIT HOURS / YEAR (2 YEAR COURSE)

Students may enroll in Year 1 independently of Year 2. Year 1 will meet the Foxcroft Academy graduation requirement of a junior- or senior-level Topics in English course. Students must have successfully completed Year 1 in order to continue in Year 2.

The Language A: Language and Literature course introduces the critical study and interpretation of written and spoken texts from a wide range of literary and non-literary genres. The formal analysis of texts is supplemented by awareness that meaning is not fixed but can change in respect to contexts of production and consumption.

The course is organized into four parts, each focussed on the study of either literary or non-literary texts. Together, the four parts of the course allow the student to explore the language A in question through its cultural development and use, its media forms and functions, and its literature. Students develop skills of literary and textual analysis, and also the ability to present their ideas effectively. A key aim is the development of critical literacy.

PREREQUISITE

Successful completion of English II CP or Honors, or Department Head approval.

ELECTIVE COURSES

*Please note that these courses **do not count** toward graduation progress in English requirements.*

CREATIVE WRITING 115

0.5 CREDIT HOURS

This course uses the writers workshop model to help students grow as writers and content producers through a series of 3-week units focused on a variety of topics selected by teacher-student collaboration. Unit topics may include Short Story, Novel, Silent Film, Script Writing, Podcasts, Children's Lit, Poetry, and more. Standards addressed include Writers Workshop, Editing & Revision, and Portfolio & Publication. Students will compile work in a portfolio that is presented at the end of the course.

In addition to Academic Initiative, students earning credit in Creative Writing will satisfactorily complete the following standards:

<u>CREATIVE WRITING STANDARDS</u>
WRITING PROCESS (FA1.115.1)
Student practices different writing processes and works to develop his or her own writing process.
AUTHOR'S CRAFT (FA1.115.2)
Student creates polished pieces in a variety of genres through a process of editing and revision.
WORKSHOP (FA1.115.3)
Student collaborates with peers to critique and provide feedback (positive and constructive) on classmates' work.
LITERARY TECHNIQUES (FA1.115.4)
Student evaluates the appropriateness and necessity of literary techniques and utilizes a variety of techniques to enhance his or her writing.

PREREQUISITE

None.

ELEMENTS OF WRITING 115A

0.5 CREDIT HOURS

In this general writing workshop students will work on structural writing skills, like developing evidence, identifying patterns and clarifying thesis statements. Students will also work to expand their working vocabulary. Works may be drawn from a variety of content areas. Essay writing will focus on writing across the Humanities. This half-credit academic elective will rely heavily, though not exclusively, on in class work.

PREREQUISITE

Successful completion of English I, or permission of the instructor.

ENGLISH FOR SCIENCE, MEDICINE, AND RESEARCH 115B

0.5 CREDIT HOURS

Scientific and Medical Terminology will be a primary emphasis in the course. We will draw on Greek, Latin and German roots, suffixes, and prefixes to deepen technical vocabulary and support the pursuit of medical and scientific careers. Students will also practice essay writing across a variety of disciplines, depending on the interests of each student. Sentence structure, syntax, and incorporating research into the essay will further strengthen students' written analysis. This half-credit academic elective will rely heavily, though not exclusively, on in class work.

PREREQUISITE

Completion of one credit of foreign language study and English I, or permission of Instructor.

HONORS WRITING CENTER 116A

1.0 CREDIT HOURS

This English Elective will provide students with the necessary training to become writing tutors. Students will read articles and professional literature about the writing process in addition to extensive writing, revising, and editing. All students will develop their skills as writers within multiple genres, including formal academic writing across disciplines.

In addition to Academic Initiative, students earning credit in Writing Center will satisfactorily complete the following standards:

HONORS WRITING CENTER STANDARDS

WRITING PROCESS (FA1.116.1)

Students recognize writing as a process, and apply this knowledge to their own writing practice. They understand planning, drafting, revising, and publishing as key elements of the process, and are able to identify the steps in their own sequence of writing.

INTERPERSONAL COMMUNICATION (FA1.116.2)

Students will be proficient writers, speakers, and listeners. They will recognize verbal and nonverbal cues and respond accordingly when interacting with others, and apply sound communication practices to peer writing conferences.

WRITING CENTER THEORY (FA1.116.3)

Students understand and support the theories behind secondary writing centers, and develop their skills as tutors under these theories. Students will learn and demonstrate proficiency in the effective practices of teaching writing, including minimalist tutoring.

PREREQUISITE

Successful completion of English I.

ENGLISH AS A SECOND LANGUAGE (ESL)

ESL programming serves all students for whom English is not a native language.

ESL 550

0 CREDIT HOURS

ESL is designed to support students as they acclimate to academic and conversational English. This course focuses on developing students' reading, writing, listening, and speaking skills through a combination of written, visual, and auditory media. Grammar topics studied include, but are not limited to, parts of speech, articles, sentence word order, and independent and dependent clauses. In addition to being grammar-intensive, this course focuses on vocabulary acquisition through a study of subject-specific words as a way to prepare students for their other classes. Students are assessed on their ability to clearly communicate in English via written and oral means. This course prepares students for the literary-focused courses of ESL I and II.

In addition to Academic Initiative, ESL will satisfactorily complete the following standards:

ESL STANDARDS

INTERPERSONAL COMMUNICATION

Engage in conversations and informal written correspondence on a variety of topics.

Performance Indicators:

- a) Ask and respond to questions about familiar topics based on their own lives and interests.
- b) Express feelings and emotions in English
- c) Comprehend and produce vocabulary in appropriate contexts when engaged in conversations or correspondence.

INTERPRETIVE COMMUNICATION

Understand and interpret written and spoken language on a variety of topics.

Performance Indicators:

- a) Identify main ideas, topics, and specific information in a variety of authentic auditory, visual, and written materials.
- b) Apply comprehension strategies to interpret text

ENGLISH CONVENTIONS

Use appropriate grammar and vocabulary to communicate effectively within different contexts.

Performance Indicators:

- a) Acquire and accurately use general and domain-specific words and phrases.
- b) Use context as a clue to determine the meaning of words and phrases.
- c) Generate works that conform to standard conventions.

ESL LITERATURE AND COMPOSITION I 554

0 CREDIT HOURS

This course is designed for students who need an introduction to secondary-level English coursework. Students will strengthen their reading, writing, listening, and speaking skills. Students will begin to interpret and write about material and become accustomed to American academic guidelines and expectations. Texts include a graphic novel, a novel, and

short stories. Students will write essays, do group projects, study grammar and vocabulary, and participate in class discussions.

PREREQUISITE

None.

ESL LITERATURE AND COMPOSITION II 564

1.0 CREDIT HOURS

This course is designed for students who are preparing to take a CP English course in the following semester. Students will continue to develop their reading, writing, listening, and speaking skills. Students will begin to interpret and write about material as they would in a mainstream English class at the CP level. Texts include a graphic novel, a novel, short stories. Students will write essays, complete group projects, study grammar and vocabulary, and participate in class discussions. The final for the course is a research-based project that requires students put their reading, writing, research, and speaking skills to work to produce an episode of a podcast.

This course counts as the English I, II, or III graduation requirement in English depending on the grade level and prior experience of the student.

PREREQUISITE

Successful completion of ESL I, or placement recommendation based on TOEFL scores or Foxcroft Academy's chosen placement test.

ESL SUPPORT 553

0 CREDIT HOURS

This structured study provides support for ESL students to help them meet with success in their mainstream coursework. This course is a mandatory enrollment for all international boarding students in their first semester of enrollment and until the student meets all standards in all courses for one quarter. ESL students who are not mandatorily enrolled may electively enroll in ESL Support instead of Study Hall.

MATHEMATICS

GRADUATION REQUIREMENT

To graduate from Foxcroft Academy, students must earn a minimum of three credits in Mathematics, mastering content in Algebra I, Geometry, and in either Algebra II or Statistics.

REQUIRED COURSES

ALGEBRA I 312

ALGEBRA I CP 311

HONORS ALGEBRA I 313

1.0 CREDIT HOUR

Algebra 1 presents the elementary skills and concepts necessary to continue in college level mathematics. Major topics covered are properties, equations and inequalities, polynomial expressions, graphing, development of the real number system including radicals, and terminating with the study of quadratic equations. Applications of algebraic principles are included, with emphasis placed on problem-solving techniques. Instructional units in the course are aligned to state and national mathematics performance standards.

In addition to Academic Initiative, students earning credit in Algebra I will satisfactorily complete the following standards:

ALGEBRA I STANDARDS

NUMBER AND QUANTITY (FA1.ALG1.1) NUMBER AND QUANTITY
(FA1.ALG1.1)

To be designated proficient in the Introduction to Number and Quantity Standard, a student must be able to reason quantitatively, using units and number systems to solve and model real-world situations.

- Apply the properties of exponents to simplify expressions and equations
- Understand rational and irrational numbers and use them to reason quantitatively
- Use appropriate dimensional units to represent quantities in modeling and problem solving situations
- Analyze the components and terms of algebraic expressions to facilitate simplification and solution

EQUATIONS AND INEQUALITIES (FA1.ALG1.2)

To be designated proficient in the Equations and Inequalities Standard, a student must be able to use expressions, equations, and inequalities to represent, create, evaluate, and solve real-world situations involving single unknown quantities.

- Use graphs to represent and solve equations and inequalities
- Use algebraic properties to solve single variable equations and inequalities
- Solve systems of equations graphically and algebraically and assess solution pathways
- Create, apply, and solve equations and inequalities that model real-world situations and relationships

INTRODUCTION TO FUNCTIONS (FA1.ALG1.3)

To be designated proficient in the Introduction to Functions Standard a student must be able to use linear and quadratic equations, functions, and systems, both graphically and algebraically, to address real-world situations involving multiple variables.

- Understand the concept of a function and use function notation
- Analyze functions using varying representation
- Construct and compare linear and nonlinear functions to solve problems
- Perform arithmetic operations on polynomials, demonstrating an understanding of the impact of domain on the function
- Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a graph of the function defined by the polynomial

PREREQUISITE

None.

GEOMETRY 322

GEOMETRY CP 321

HONORS GEOMETRY 323

1.0 CREDIT HOUR

This course investigates the properties and theorems of Euclidean Geometry. Properties of polygons, space figures, and circles are developed, as well as general principles of congruence. An integrated approach is used to link geometry with algebra. Instructional units in the course are aligned to state and national mathematics performance standards.

In addition to Academic Initiative, students earning credit in Geometry will satisfactorily complete the following standards:

GEOMETRY STANDARDS

GEOMETRIC PROOFS (FA1.GEOM.1)

To be designated proficient in the Geometric Proofs Standard a student will be able to prove, understand, and model geometric concepts.

- Prove geometry theorems relative to lines, triangles, angles and parallelograms
- Develop and argument using inductive and deductive reasoning
- Interpret congruence and similarity criteria for triangles to defend and to prove relationships in geometric figures

MEASUREMENT (FA1.GEOM.2)

To be designated proficient in the Measurement Standard a student will be able to identify and illustrate measurable attributes of objects and the units, systems, and processes of measurement.

- Make decisions about units and scales that are appropriate for problem situations involving measurement
- Analyze precision, accuracy and approximate error in measurement situations
- Select and apply formulas for the area, surface area, and volume of geometric figures, including cones, spheres, and cylinders
- Employ unit analysis to check measurement computations

POLYGONS (FA1.GEOM.3)

To be designated proficient in the Polygons Standard a student will be able to identify and classify plane figures.

- Apply the proper formula to compute the areas and perimeters of plane figures
- Categorize and justify the relationship among polygons based on their properties
- Explain conditions and properties of parallelograms and special quadrilaterals

PREREQUISITE

Successful completion of Algebra 1, Placement Exam, or Department Head approval.

ALGEBRA II CP 331

HONORS ALGEBRA II 333

1.0 CREDIT HOUR

This course begins with a review of the concepts introduced in Algebra 1 and continues with further development of algebraic skills and concepts. The course also includes topics in discrete mathematics. Emphasis is placed on working with quadratics and higher-degree expressions, equations, and inequalities. Instructional units in the course are aligned to state and national mathematics performance standards.

In addition to Academic Initiative, students earning credit in Algebra II will satisfactorily complete the following standards:

ALGEBRA II STANDARDS

NUMBER AND QUANTITY (FA1.ALG2.1)

To be designated proficient in the Number and Quantity Standard a student must be able to reason and model quantitatively, using units and number systems.

- Perform arithmetic operations with complex numbers and matrices
- Perform arithmetic operations with polynomials and rational expressions
- Understand the process of solving equations and inequalities

PROBABILITY AND STATISTICS (FA1.ALG2.2)

To be designated proficient in the Probability and Statistics Standard a student must be able to select and use appropriate statistical methods to analyze data.

- Use probability to evaluate outcomes of decisions
- Understand and evaluate random processes underlying statistical experiments
- Understand statistics as a process for making inferences about population parameters based on random samples from that population
- Understand independent and conditional probabilities and use them to interpret data.

FUNCTIONS (FA1.ALG2.3)

To be designated proficient in the Functions Standard a student must be able to interpret, analyze, construct and solve linear, quadratic, and exponential functions.

- Understand the concept of a function and use function notation
- Analyze functions using different representations
- Build new functions from existing functions
- Build a function that models a relation between two quantities
- Construct and compare polynomial and exponential models to solve problems
- Perform operations with sequences and series

PREREQUISITE

Successful completion of Geometry, Placement Exam or Department Head approval.

STATISTICS 344A



STATISTICS CP 344B

1.0 CREDIT HOUR

Students will learn basic statistical methods in the classroom, using software to create and to explain graphs and curves from data sets. Emphasis will be placed on comprehending and explaining statistical phenomena, with a focus on real-world problems. Students will create research projects and collect data to answer questions of interest by applying knowledge gained in the course.

In addition to Academic Initiative, students earning credit in Statistics will satisfactorily complete the following standards:

STATISTICS STANDARDS

EXPLORATORY DATA ANALYSIS (FA1.344.1)

To be designated proficient in the Exploratory Data Analysis standard, a student must be able to summarize the main characteristics of data sets.

- Summarize data through use of displays or visuals, not models
- Revise or eliminate hypotheses based on informal analysis of data
- Identify potential models that could be applied to the data

EXPERIMENT DESIGN (FA1.344.2)

To be designated proficient in the Experiment Design standard, a student must be able to identify and assess the components of designed experiments.

- Identify and critique the central questions, hypotheses, and conclusions of experiments
- Identify and critique the experimental design, data collection methods, and summaries of experiments

PROBABILITY AND SIMULATION (FA1.344.3)

To be designated proficient in the Probability Simulation standard, a student must be able to model and simulate random events.

- Identify fair sampling methods
- Determine if sampling results are valid

INFERENCE (FA1.344.4)

To be designated proficient in the Inference standard, a student must be able to derive logical conclusions about populations based on data.

- Test hypotheses and calculate estimates for given populations
- Utilize models and theories (Normal, Linear, Bayesian)

PREREQUISITE

Successful completion of Geometry, Placement Exam, or department head approval.

ELECTIVES

PERSONAL FINANCE 308



1.0 CREDIT HOUR

This course is designed for students interested in learning about economic and financial literacy. Topics include, but are not restricted to: local, state, and federal taxes; financial goals; budget creation; banking basics; credit and debit cards; investments; insurance basics.

In addition to Academic Initiative, students earning credit in Personal Finance will satisfactorily complete the following standards:

PERSONAL FINANCE STANDARDS

FINANCIAL DECISION MAKING (FA1.308.1)

To be designated proficient in the Financial Decision Making standard, students will be able to apply reliable information and systematic decision making to personal financial decisions.

- Develop a definition of wealth based on personal values, priorities, and goals
- Make criterion-based financial decisions by systematically considering alternatives and consequences by weighing trade-offs and opportunity costs
- Recognize the responsibilities associated with personal financial decisions and utilize a rational process of financial decision-making
- Use personal career goals to create a detailed, accurate, comprehensive, and reasonable personal financial plan

EMPLOYMENT INCOME AND BUDGETING (FA1.308.2)

PERSONAL FINANCE STANDARDS

To be designated proficient in the Employment, Income, and Budgeting standard, students will use a career plan to develop personal income and apply strategies to monitor income and expenses.

- Explore career options and compare sources of personal income and compensation
- Give examples of employee benefits and explain why they are forms of compensation, and differentiate between required employer contributions and additional benefits an employer might offer
- Differentiate between required and optional paycheck deductions and understand the function of each, and calculate how payroll deductions affect take-home pay
- Explain the difference between progressive and regressive taxes, illustrate the relationship between income level and income tax liability
- Understand the various tax forms and know how to fill out a W-4, 1040 EZ, and state income tax form
- Understand the budgeting cycle process and be able to apply it to various situations

SAVING AND INVESTING (FA1.308.3)

To be designated proficient in the Saving and Investing standard, students will be able to implement a savings and diversified investment strategy that is compatible with personal financial goals

Performance Indicators

- Explain the difference between saving and investing and why both are part of a sound financial plan
- Analyze how various factors and affect the value of investments
- Know the risks associated with different types of investments
- Compare and contrast the different types of local financial institutions and the services they provide

CREDIT DEBT AND RISK (FA1.308.4)

PERSONAL FINANCE STANDARDS

To be designated proficient in the Credit, Debt, and Risk standard, students will develop strategies to control and manage credit, debit, and risk.

Performance Indicators

- Summarize the advantages and disadvantages of using credit, and assess whether a specific purchase justifies the use of credit
- Explain how interest rate, compounding frequency, and loan length affect the cost of using credit, and calculate the total cost of repaying a loan under various interest rates and over different periods
- Differentiate among various types of student loans and alternatives as a means of paying for post secondary education and predict the potential consequences of deferred payment of student loans
- Explain the effect of debt on a person's net worth
- Understand credit scores and how credit history affects a person's credit worthiness, and know how to access personal credit history
- Identify common types of risk and basic risk management methods, and understand how to reduce and transfer risk through insurance
- Know how to protect oneself from theft of personal financial information

PREREQUISITE

Successful completion of Statistics or Algebra II, Placement Exam, or Department Head approval.

FUNCTIONS, STATISTICS, AND TRIGONOMETRY CP 336

1.0 CREDIT HOURS

This course is intended for students who want to extend their mathematics knowledge base but are not ready for a more rigorous pre-calculus class. In this course, students will reinforce and extend algebra skills, investigate statistical applications, and increase their knowledge of polynomial, exponential, and trigonometric functions. Instructional units in the course are aligned to state and national mathematics performance standards.

In addition to Academic Initiative, students earning credit in Functions, Statistics, and Trigonometry CP will satisfactorily complete the following standards:

FUNCTIONS, STATISTICS AND TRIGONOMETRY STANDARDS

POLYNOMIAL FUNCTIONS (FA1.336.1)

- Use and apply linear equations and inequalities in one variable
- Use and apply linear equations and inequalities in two variables
- Perform the operations of addition, subtraction, multiplication, division, and composition on polynomial functions
- Express quadratics in both standard and vertex form, find the vertex and symmetry of parabolas, and solve quadratic equations by graphing and algebraic methods
- Find the zeros of higher degree polynomial functions using graphs and synthetic substitution
- Real world problems

RATIONAL, EXPONENTIAL, AND LOGARITHMIC FUNCTIONS (FA1.336.2)

- Perform the four arithmetic operations on rational functions
- Analyze asymptotic behavior in rational functions
- Solve equations containing rational expressions
- View exponential and logarithmic functions as inverses of one another
- Use properties of exponents and logarithms to simplify expressions
- Use graphing technology to solve growth/decay problems as modeled by exponential/logarithmic functions

TRIGONOMETRIC FUNCTIONS (FA1.336.3)

FUNCTIONS, STATISTICS AND TRIGONOMETRY STANDARDS

- Use the definition of the trigonometric functions of acute and non-acute angles
- Solve right triangles
- View trigonometric functions as circular functions with the logical extension to radian measure
- Apply the graphs of sine waves in modeling natural periodic behavior
- Simplify trigonometric expressions using fundamental identities

EXPLORATORY DATA ANALYSIS (FA1.336.4)

- Summarize large data sets using relevant graphs, including histogram, boxplot, dotplot
- Use appropriate measures of center and variability to best summarize data sets
- Use the Normal Model to make appropriate inferences about data

PREREQUISITE

Successful completion of Algebra II, Placement Exam, or Department Head approval.

HONORS PRECALCULUS 341

1.0 CREDIT HOURS

This course is designed to benefit those students with special interest in mathematics, those who may be considering careers in mathematics-related fields, or those who will be applying to post-secondary schools with selective admissions. The course will cover such topics and functions, including polynomial, exponential and logarithmic functions; rational equations; the complex number system; and trigonometry. Instructional units in the course are aligned to state and national mathematics performance standards.

In addition to Academic Initiative, students earning credit in Honors Precalculus will satisfactorily complete the following standards:

HONORS PRECALCULUS STANDARDS

ALGEBRAIC FUNCTIONS (FA1.341.1)

To be designated proficient in the Algebraic Functions Standard a student must be able to identify, analyze, and evaluate algebraic functions

- Graph algebraic functions and identify their defining features and behavior
- Evaluate algebraic functions to find solutions, both real and complex
- Apply algebraic functions to mathematical models to solve real-world problems

LOGARITHMIC AND EXPONENTIAL FUNCTIONS (FA1.341.2)

To be designated proficient in the Logarithmic and Exponential Functions Standard a student must be able to identify, analyze, and evaluate logarithmic and exponential functions.

- Understand, identify and verify the inverse relationship between logarithmic and exponential functions
- Use exponential functions as growth and/or decay models
- Use logarithmic functions to model natural phenomena
- Graph exponential and logarithmic functions and identify their defining features and behavior

TRIGONOMETRY (FA1.341.3)

To be designated proficient in the Trigonometric Functions Standard a student must be able to define and apply trigonometric functions.

- Understand trigonometric functions as ratios of the sides of a triangle and compute the value of special angles given in radians and degrees
- Model periodic phenomena with trigonometric functions
- Prove and apply trigonometric identities
- Graph trigonometric functions, including phase shift, vertical shift, and changes in periodicity and amplitude

PREREQUISITE

Successful completion of Honors Algebra II, Placement Exam, or Department Head approval.

ADVANCED PLACEMENT COURSES

AP CALCULUS AB 340



2.0 CREDIT HOURS

This course is intended for students who have a thorough knowledge of college preparatory mathematics. It follows the College Board's Advanced Placement Calculus curriculum. Topics include algebraic, trigonometric, exponential, and logarithmic functions, as well as differential and integral calculus. Strong scores on the College Board exam given in May may earn students placement out of their introductory college mathematics requirement or possible college credit. The test is mandatory and the cost is borne by the student.

In addition to Academic Initiative, students earning credit in AP Calculus AB will satisfactorily complete the following standards:

<u>AP CALCULUS AB STANDARDS</u>
<i>DIFFERENTIAL CALCULUS (FA1.340.1)</i>
<ul style="list-style-type: none">• Rates of change/linear approximation• Determine rates of change: graphically, numerically, analytically
<i>INTEGRAL CALCULUS (FA1.340.2)</i>
<ul style="list-style-type: none">• Limits of sums• Net rate of change
<i>FA1.340.3 - DIFFERENTIAL AND INTEGRAL CALCULUS</i>
<ul style="list-style-type: none">• Applications• Slope fields• AP practice exams

PREREQUISITES

Successful completion of Honors Precalculus, Placement Exam, or Department Head approval.



AP CALCULUS BC 342

2.0 CREDIT HOURS

This course is intended for students who have a thorough knowledge of college preparatory mathematics. It follows the College Board's Advanced Placement Calculus curriculum. Topics include algebraic, trigonometric, exponential, and logarithmic functions, as well as differential and integral calculus. Strong scores on the College Board exam given in May may earn students placement out of their introductory college mathematics requirement or possible college credit. The test is mandatory and the cost is borne by the student.

In addition to Academic Initiative, students earning credit in AP Calculus BC will satisfactorily complete the following standards:

<u>AP CALCULUS BC STANDARDS</u>
<i>DIFFERENTIAL EQUATIONS AND MATHEMATICAL MODELING (FA1.342.1)</i>
<ul style="list-style-type: none">• Slope fields and Euler's Method• Antidifferentiation by substitution• Antidifferentiation by parts• Exponential growth and decay• Logistic growth
<i>APPLICATIONS OF DEFINITE INTEGRALS (FA1.342.2)</i>
<ul style="list-style-type: none">• Integral as net change• Areas in the plane• Volumes• Lengths of curves• Applications from science and statistics
<i>SEQUENCES, INDETERMINATE FORMS, AND IMPROPER INTEGRALS (FA1.342.3)</i>

- Sequences
- L' Hospital's rule
- Relative rates of growth
- Improper integrals

INFINITE SERIES (FA1.342.4)

- Power series
- Taylor series
- Taylor's theorem
- Radius of convergence
- Testing convergence at endpoints

PARAMETRIC, VECTOR, AND POLAR FUNCTIONS (FA1.342.5)

- Parametric functions
- Vectors in the plane
- Polar functions

PREREQUISITE

Successful completion of AP Calculus AB, Placement Exam, or Department Head approval.

AP STATISTICS

2.0 CREDIT HOURS

This course is intended for students who have a thorough knowledge of college preparatory mathematics. It follows the College Board's Advanced Placement curriculum. Topics include exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Strong scores on the College Board exam given in May at Foxcroft Academy may earn students placement out of their introductory college mathematics requirement or possible college credit. The test is mandatory and the cost is borne by the student.

In addition to Academic Initiative, students earning credit in AP Statistics will satisfactorily complete the following standards: Exploratory Data Analysis; Experiment Design; Probability and Simulation; Inference.

PREREQUISITE

Successful completion of Honors Precalculus, Placement Exam, or Department Head approval.

INTERNATIONAL BACCALAUREATE COURSES

IB MATHEMATICS: APPLICATIONS AND INTERPRETATION SL IB345

1.5 CREDIT HOURS / YEAR (2 YEAR COURSE)

Students may enroll in Year 1 independently of Year 2. Year 1 will meet the Foxcroft Academy graduation requirement of a Mathematics course. Students must have successfully completed Year 1 in order to continue in Year 2.

Mathematics: Applications and Interpretation SL is appropriate for students who are interested in developing their mathematics for describing our world and solving practical problems. They will also be interested in harnessing the power of technology alongside exploring mathematical models. Students who take Mathematics: Applications and interpretation will be those who enjoy mathematics best when seen in a practical context. This subject is aimed at students who will go on to study subjects such as social sciences, natural sciences, statistics, business, some economics, psychology, and design, for example. This is a course that will meet every other day for two years.

In addition to Academic Initiative, students earning credit in IB Mathematics will satisfactorily complete the following standards:

<u>IB MATHEMATICS: APPLICATIONS AND INTERPRETATION SL</u>
NUMBER AND ALGEBRA
To be designated proficient in the Number & Algebra Standard a student must be able to represent patterns, show equivalencies and make generalizations to model real-world situations.
FUNCTIONS
To be designated proficient in the Functions Standard a student must be able to create different representations of functions to model the relationships between variables.

IB MATHEMATICS: APPLICATIONS AND INTERPRETATION SL

GEOMETRY AND TRIGONOMETRY

To be designated proficient in the Geometry & Trigonometry Standard a student must be able to analyze, measure, and transform quantities, movements, and relationships.

PROBABILITY AND STATISTICS

To be designated proficient in the Probability & Statistics Standard a student must be able to collect, analyze, and interpret data and estimate, test, and predict using models.

CALCULUS

To be designated proficient in the Calculus Standard a student must be able to model, interpret and analyze real-world problems using rates of change and limiting areas.

PREREQUISITE

Successful completion of Algebra II, Placement Exam, or Department Head approval.

SCIENCE AND TECHNOLOGY

GRADUATION REQUIREMENT

To graduate from Foxcroft Academy, students must earn at least one credit each in Physics, Chemistry, and Biology.

SHARED COURSE STANDARDS

All non-elective Science courses require students to meet the Standards of Science Practices:

SHARED COURSE STANDARDS

SCIENCE PRACTICES (FA1.SP)

- Asking scientific questions that can be tested empirically and structuring these questions in the form of testable predictions.
- Collecting data to address scientific questions and to support predictions.
- Searching for regularities and patterns in observations and measurements.
- Using evidence and science knowledge to construct scientific explanations, models and representations.
- Using mathematical reasoning and quantitative applications to interpret and analyze data to solve problems.

REQUIRED COURSES

CONCEPTUAL PHYSICS STANDARD LEVEL 441A

HONORS CONCEPTUAL PHYSICS 441B

1.0 CREDIT HOUR

In Conceptual Physics, students explore mechanics including motion, forces, and energy. An emphasis is placed on hands-on investigation of Physics principles. At the Standard Level, relationships between velocity, acceleration, forces, and energy are developed through laboratory experiences. Scientific Practice skills are assessed through formal lab reports and performance objectives. Conceptual Physics is considered a lab science.

In addition to Academic Initiative, students earning credit in Conceptual Physics will satisfactorily complete the following standards:

CONCEPTUAL PHYSICS STANDARDS

MOTION (FA1.PHYS.1)

Motion: The motion standard introduces physics students to concepts of position, velocity, and acceleration. This includes understanding how vectors and scalars work with motion.

To be proficient in the Motion Standard, a student must:

- Demonstrate understanding of the relationships between position, velocity, and acceleration using a variety of representations (mathematics, graphs, written).
- Demonstrate understanding of the constant effect of gravity and how it affects motion.
- Demonstrate how to find motion quantities using measurement.

FORCE (FA1.PHYS.2)

Forces: The forces standard joins the concepts learned in the Motion standard with the ability to analyze how objects interact with each other.

- Demonstrate understanding of how forces create motion using Newton's Laws of motion.
- Demonstrate understanding of the relationships between forces in two dimensions using mathematics, graphs, and written.
- Demonstrate understanding of how resistance forces affect motion.

ENERGY (FA1.PHYS.3)

Energy: The concept of different kinds of energy is essential to understanding Physics as a discipline.

- Demonstrate understanding of the concept of work and how it relates to forces.
- Demonstrate understanding of different types of energy and how they relate to work.
- Demonstrate understanding of the concept of conservation of energy using a variety of representations.

PREREQUISITE

None.

CHEMISTRY 437

1.0 CREDIT HOUR

CHEMISTRY CP 432

HONORS CHEMISTRY 436

1.5 CREDIT HOURS

The objective in chemistry is for students to investigate the properties of atoms, chemical bonding and chemical reactions. Students develop conceptual aptitude in the chemical sciences through scientific inquiry (laboratory activities). Students will develop their skills in problem solving, scientific reasoning and communication by writing formal laboratory reports. Chemistry at the CP or Honors level is considered a lab science.

In addition to Academic Initiative and Science Practices standards, students earning credit in Chemistry will satisfactorily complete the following standards:

CHEMISTRY STANDARDS

STRUCTURE AND PROPERTIES OF MATTER (FA1.CHEM.3)

Matter is composed of small particles called atoms that are in constant motion and that combine in various predictable ways. To be proficient in the Structure of Matter Standard, a student must:

- Describe the current model of the atomic structure, how the model has changed over time, and how experimental evidence about atomic structure has led to changes in the atomic model.
- Explain that the interactions of electrons between and within atoms are the primary factors that determine the properties of matter.
- Compare and contrast matter which is composed of atoms of elements, most of which are bonded in different but predictable ways
- Construct Lewis structures for atoms, molecules and ionic substances can be represented with a variety of models.

MATTER AND CHANGE (FA1.CHEM.4)

The properties of matter and the changes that matter undergoes result from its atomic-molecular level structure. For any chemical or physical change, matter is conserved.

- Make a claim, using a data table listing chemical and physical properties and justify relationship between molecular-level structures.
- Construct a molecular-level representation of the chemical reaction, and explain, using the concept of atoms, why matter is conserved during any change.

ENERGY AND CHANGE (FA1.CHEM.5)

When any change occurs, energy is transferred and/or transformed, but it is never lost.

- Identify, given a change to a defined system and its surroundings, the direction of thermal energy transfer (heat) as either endothermic or exothermic. Conversely, predict the change to the temperature of the system and on the surroundings. Explain, using the conservation of energy, why thermal energy lost by a system is gained by the surroundings, or vice versa.
- Investigate the relationship between temperature and thermal energy.
- Construct an energy diagram to represent the energy changes that occur during a reaction, and identify whether the reaction is endothermic or exothermic.

PREREQUISITE

Algebra 1 is recommended for CP or Honors Chemistry.

BIOLOGY 427

1.0 CREDIT HOUR

BIOLOGY CP 422

1.5 CREDIT HOURS

Biology encompasses coursework in the following content standards: Structure and Function, Inheritance and Variation, Matter and Energy in Organisms and Ecosystems, Interdependent Relationships in Ecosystems, Natural Selection and Evolution, and Scientific Practices. The use of the environmental surroundings and technology serve to enhance student's progress toward meeting the aforementioned standards. Biology at the CP level is considered a lab science.

In addition to Academic Initiative and Scientific Practices, students earning credit in Biology will satisfactorily complete the following standards:

BIOLOGY STANDARDS

STRUCTURE AND FUNCTION (FA1.BIO.2)

This standard examines the correlation between structure and function in living things from the molecular level, to the cellular level, to the level of the entire multicellular organism. It explores the question, “how do the structures of life enable life’s functions?” It includes the topics of basic organic compound structure and function, cellular structure and function, and hierarchical structure and function of multicellular organisms.

INHERITANCE AND VARIATION (FA1.BIO.4)

The roles that cell division, DNA, genes, and chromosomes play in inheritance and variation. “How are the characteristics from one generation related to the previous generation?” It includes the topics of cell division, DNA replication, protein synthesis, and inheritance patterns, among others.

MATTER AND ENERGY IN ORGANISMS AND ECOSYSTEMS (FA.BIO.5)

This standard covers how organisms obtain and use energy. It asks the question, “how do matter and energy move through ecosystems?” It includes the topics of photosynthesis, cellular respiration, biogeochemical cycles, and food chains, webs, and pyramids.

INTERDEPENDENT RELATIONSHIPS IN ECOSYSTEMS (FA.BIO.1)

This standard encompasses the idea that organisms interact with each other and the non-living environment. It includes the topics of biomes and smaller ecosystems, population dynamics and community interactions, as well as environmental ecology.

NATURAL SELECTION AND EVOLUTION (FA.BIO.6)

This standard establishes the unity and diversity of life. It includes the topics of taxonomic classification systems, mechanisms of natural selection, the nature of scientific theory and law, and micro- and macroevolution.

PREREQUISITE

Successful completion of Conceptual Physics and Chemistry.

ADVANCED PLACEMENT COURSES

AP CHEMISTRY 430

2.0 CREDIT HOURS

AP Chemistry is a survey chemistry course that approximates the introductory college chemistry course often required in the first year of college. The course will reinforce and expand upon the standards previously met in chemistry. The text is a college-level text. Excellent problem-solving skills and lab report writing skills are necessary. Strong scores on the College Board exam given in May at Foxcroft Academy may earn students placement out of their introductory college chemistry requirement or possibly college credit. The test is mandatory and the cost is borne by the student.

In addition to Academic Initiative and Science Practices, students earning credit in AP Chemistry will satisfactorily complete the following standards:

AP CHEMISTRY STANDARDS

STRUCTURE AND PROPERTIES OF MATTER (FA1.430.1)

Transformations of matter can be observed in multiple ways that are generally labeled as either chemical or physical change. These categories can generally be differentiated through the electrostatic (Coulombic) forces that are associated with a given change at the particle level. The shapes of the particles involved, and the space between them, are key factors in determining the nature of physical changes. Applying the general concepts of varying strengths of chemical bonds and weaker intermolecular interactions, many properties of a wide range of chemical systems can be understood.

KINETICS AND THERMODYNAMICS (FA1.430.2)

This requirement studies how the availability or disposition of energy plays a role in virtually all observed chemical processes, as well as, the rates of chemical changes being determined by the aspects of the molecular collisions. Thermodynamics provides a number of tools for understanding energy transfers, change in potential energy from changes in electrostatic forces, and the concept of entropy. Essentially, the method in which the rate of change is observed is to measure changes in concentration of the chemical species as a function of time. Measured rates for reactions observed at the macroscopic level can usually be described mathematically in an expression referred to as the rate law. Furthermore, the progress of reactions at the particle level can be connected to the rate law.

CHEMICAL REACTIONS (FA1.430.3)

Changes in matter involve the rearrangement and/or reorganization of atoms and/or the transfer of electrons. Such chemical processes may be observed in a variety of ways, and often involve changes in energy as well. Because there is a large diversity of possible chemical reactions, it is useful to categorize reactions and be able to recognize the category into which a given reaction falls.

EQUILIBRIUM (FA1.430.4)

This standard deals with the fact numerous processes in nature, including large numbers of chemical reactions, are reversible, i.e., these processes can proceed in either direction. The use of mathematics to quantify the equilibrium constant, K , describes the equilibrium state associated with a chemical change. A wide range of equilibrium constants is possible; of particular significance are those that arise from acid-base chemistry, particularly as embodied in biochemical systems.

PREREQUISITE

Successful completion of Biology and Chemistry at the Honors level, or teacher permission. A very strong performance in Biology and Chemistry at the CP level may qualify students for AP placement.

AP PHYSICS 1 449

2.0 CREDIT HOURS

AP Physics 1 is a year-long course equivalent to a first-semester college course in algebra-based Physics. Strong scores on the College Board exam given in May at Foxcroft Academy may earn students placement out of their introductory college chemistry requirement or possibly college credit. The test is mandatory and the cost is borne by the student.

In addition to the Academic Initiative and Scientific Practice Standards, students earning credit in AP Physics will have to complete the following standards:

AP PHYSICS I STANDARDS

MOTION AND MOMENTUM (FA1.449.1)

Motion or movement is something we observe in everyday life. Students will examine the nature of translational and rotational motion and how they relate. In particular, they will determine how interactions between objects lead to changes in the motion of those objects. They will use vectors to predict the motion of objects in two dimensions.

FORCES (FA1.449.2)

The interactions of an object with other objects can be described with forces. Students will support that the behavior of forces can be predicted using Newton's Laws. They will examine how interactions between objects can cause different types of forces and the effects of forces on objects.

ENERGY (FA1.449.3)

AP PHYSICS I STANDARDS

Energy can be used to describe changes that occur in a system as the result of interactions. Students use conservation laws to predict how interactions between systems can result in energy changes in those systems. They will examine how energy can be transferred by waves and other means.

Honors Physics may be co-scheduled with the first semester of AP Physics I. If so, it will follow the AP Physics I curriculum.

PREREQUISITE

Successful completion of Physics, Chemistry, and Algebra II at the Honors level, or teacher permission. A very strong performance in Physics, Chemistry, and Algebra II at the CP level may qualify students for AP placement. AP Physics 1 may be taken as a first-year course for students with a strong interest and aptitude in Physics / Engineering with permission from the Science Department. Successful completion will meet the Physics graduation requirement.

INTERNATIONAL BACCALAUREATE COURSES

IB BIOLOGY HL IB420

2.0 CREDIT HOURS / YEAR (2 YEAR COURSE)

Students may enroll in Year 1 independently of Year 2. Year 1 will meet the Foxcroft Academy graduation requirement of a Biology course. Students must have successfully completed Year 1 in order to continue in Year 2.

IB Biology is a rigorous, 2 year course occurring in the Diploma Program (DP) candidate's junior and senior year that meets internationally-recognized expectations of topics and learning outcomes in Biology. In addition to fulfilling the attributes of IB's Learner Profile (LP) and adopting IB's Approaches to Teaching and Learning (ATL), the ideal candidate for this class will display strong social and collaborative skills, a flexible growth mindset, and experience in laboratory science. Due to the complexity of scheduling and the order of topics, students wishing to receive Standard-Level (SL) credit must sit for the whole HL course, but will be assessed on SL topics only. The internal assessment (IA) for the course is a laboratory report and students will also complete a Group IV project as part of their progress toward meeting DP requirements. The course cumulates with three Papers (exams issued by IB). Strong scores on these Papers may earn students college credit in Biology.

This course is integrated with the other IB courses offered in the DP, including but not limited to topics in Theory of Knowledge (TOK), the Extended Essay (EE), and others. Non-DP students may also take this course, but are subject to essentially the same course expectations as DP students.

IB BIOLOGY STANDARDS

STRUCTURE AND FUNCTION (FA1.BIO.2)

This standard examines the correlation between structure and function in living things from the molecular level, to the cellular level, to the level of the entire multicellular organism. It explores the question, “how do the structures of life enable life’s functions?” It includes the topics of basic organic compound structure and function, cellular structure and function, and hierarchical structure and function of multicellular organisms.

INHERITANCE AND VARIATION (FA1.BIO.4)

The roles that cell division, DNA, genes, and chromosomes play in inheritance and variation. “How are the characteristics from one generation related to the previous generation?” It includes the topics of cell division, DNA replication, protein synthesis, and inheritance patterns, among others.

MATTER AND ENERGY IN ORGANISMS AND ECOSYSTEMS (FA.BIO.5)

This standard covers how organisms obtain and use energy. It asks the question, “how do matter and energy move through ecosystems?” It includes the topics of photosynthesis, cellular respiration, biogeochemical cycles, and food chains, webs, and pyramids.

INTERDEPENDENT RELATIONSHIPS IN ECOSYSTEMS (FA.BIO.1)

This standard encompasses the idea that organisms interact with each other and the non-living environment. It includes the topics of biomes and smaller ecosystems, population dynamics and community interactions, as well as environmental ecology.

NATURAL SELECTION AND EVOLUTION (FA.BIO.6)

This standard establishes the unity and diversity of life. It includes the topics of taxonomic classification systems, mechanisms of natural selection, the nature of scientific theory and law, and micro- and macroevolution.

PREREQUISITE

Successful completion of Chemistry, and Physics at the Honors level, or teacher permission. A very strong performance in Chemistry, and Physics at the CP level may qualify students for IB placement.

IB ENVIRONMENTAL SYSTEMS AND SOCIETIES SL IB423

3.0 CREDIT HOURS (1 YEAR COURSE)

Through studying environmental systems and societies (ES&S) students will be provided with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face.

The teaching approach is such that students are allowed to evaluate the scientific, ethical and socio-political aspects of issues.

IB ESS STANDARDS

RESOURCES STANDARD

The Resources standard deals with energy flows through natural systems.

- Model energy and nutrient flow into an environment
- Show how different ecosystems are linked by energy flows
- Demonstrate that ecosystems can be investigated using practical quantitative techniques that enable evaluation, monitoring and modeling.
- Have a working understanding of the concepts of biodiversity and conservation

SYSTEMS STANDARD

The Systems standard consists of in depth analysis of the natural systems of the world.

- Understand how the hydrological cycle acts as a system
- Evaluate the soil system to find evidence that it is a dynamic ecosystem with inputs, outputs, storages and flows
- Demonstrate that the atmosphere is a dynamic system, essential to life on Earth and influenced by variations in all ecosystems
- Model energy flows between systems

SOCIETY STANDARD

IB ESS STANDARDS

The Society standard analyzes human impact on natural systems, and human interactions with nature.

- Discuss how human activities have disturbed stratospheric ozone formation and the management strategies now being employed to conserve it
- Discuss how different energy sources vary in sustainability, availability, cost and their socio-political implications
- Explain global impacts of climate change
- Define ecological footprint to model if human populations are living within the carrying capacity of the environment

PREREQUISITE

Successful completion of Conceptual Physics and Chemistry at the CP or Honors level.

ELECTIVE COURSES



ANATOMY AND PHYSIOLOGY 425

1.0 CREDIT HOUR

Anatomy and Physiology is a course designed to supplement the topics that the introductory Biology course provides, bridging the gap between the molecular/cellular and ecological levels of biological organization. The course will include a broad based overview of systems, utilizing vertebrate and invertebrate examples.

In addition to the Academic Initiative, students earning credit in Anatomy and Physiology will have to complete the following standards:

ANATOMY AND PHYSIOLOGY STANDARDS

FORM AND FUNCTION (FA1.425.1)

In the Form and Function standard students will connect anatomical structure and what that structure does. This standard operates mostly at the organism/system level and studies the muscular, skeletal, integumentary, nervous, and endocrine systems, among others.

ANATOMY AND PHYSIOLOGY STANDARDS

CELLS, TISSUES, AND ORGANS (FA1.425.2)

In this standard students will mostly work at the tissue level (histology), identifying cells and other features specific to particular tissue types. Students will also learn the relationships between tissues when they are present in body organs.

MORPHOLOGICAL ORIGINS (FA1.425.3)

Students will compare similarities across organisms in order to establish evolutionary relationships. Examples are primarily vertebrate but plant and invertebrate examples are given.

DISSECTION (FA1.425.4)

Beginning with an introduction to scalpels and cutting tool use, students will progress through sets of increasingly more difficult skills as dissected organisms become larger and more complex. Dissection culminates with a large vertebrate mammal: a cat, pig, rabbit, or rat.

PREREQUISITE

Successful completion of Biology and Chemistry.

ASTRONOMY 909



0.5 CREDIT HOURS

This class will familiarize students with introductory Astronomy concepts, including but not limited to, observational astronomy and constellations, orbits, seasons, planets, history of the field and telescopes. Some topics will require basic mathematics skills.

In addition to the Academic Initiative, students earning credit in Astronomy will have to complete the following standards:

ASTRONOMY STANDARDS

THEORETICAL ASTRONOMY - CONCEPTUAL (FA1.ASTRONOMY.1)

Students will develop an understanding of astrophysical concepts to predict and explain phenomena that occur from our local Solar System to galaxy clusters and the expansion of our universe.

THEORETICAL ASTRONOMY - MATHEMATICS (FA1.ASTRONOMY.2)

ASTRONOMY STANDARDS

Students will demonstrate an ability to describe astronomical phenomena with mathematical representations. Mathematical and problem solving techniques will be used to foster a deeper understanding of the universe and how objects in our universe behave and interact with one another.

OBSERVATIONAL ASTRONOMY (FA1.ASTRONOMY.3)

Students will become proficient in the many topics of Observational Astronomy, such as how to use telescopes, observing astronomical objects in different wavelengths, light and its properties, mapping out objects on the celestial sphere, etc.

PREREQUISITE

Successful completion of Algebra I.

FORENSICS 445



0.5 CREDIT HOURS

Forensics is an integrated science course in which students learn how to investigate crime. Students will learn to apply the scientific method to the crime scene. Topics may include physical evidence analysis such as blood typing, DNA analysis, and ballistics analysis. Topics may also include human profiling techniques such as handwriting analysis, statement analysis, and digital footprints.

In addition to Academic Initiative, students earning credit in Forensics will satisfactorily complete the following standards:

FORENSIC STANDARDS

BIOLOGICAL & CHEMICAL INVESTIGATION (FA1.445.1)

Forensic Biology is the application of biology to law enforcement. It can include the disciplines of anthropology, botany, entomology, odontology and DNA or protein analysis. Biological investigation is often closely related to chemical investigation in that some of the techniques used overlap.

PHYSICAL INVESTIGATION (FA1.445.3)

Physical Investigation refers to a broad spectrum of activities during crime scene analysis and the collection of evidence. Physical investigation includes areas of expertise such as latent print evidence retrieval, footwear and tire track impression analysis, digital evidence collection (i.e. cell phone, email and Internet logs), tool and mark evidence and ballistic analysis.

PREREQUISITE

Successful completion of Physics and Chemistry or instructor approval.

INVENTING THE FUTURE 601



0.5 CREDIT HOURS

This course helps students learn the basics of computer hardware and software programming. After developing an understanding of how computers work, students will develop basic proficiency in HTML, CSS, and JavaScript through a project-based approach.

In addition to Academic Initiative, students earning credit in Inventing the Future will satisfactorily complete the following standards:

INVENTING THE FUTURE STANDARDS

ETHICS AND RESEARCH (FA1.601.1)

Students will effectively use research methods to explore current issues in modern technology and Internet ethics. Students will investigate using a variety of resources and will apply the gathered information to develop and support their own opinions on the subject matter.

LOGIC (FA1.601.2)

Students will use logic and critical problem solving skills to learn HTML, CSS and JavaScript code. Students will be able to read and write their own code in these languages as well as learn how to “think like a computer.”

APPLICATION (FA1.601.3)

Students will use the information discussed in class and apply it to build their own websites, disassemble a personal computer, encrypt messages with binary, argue in a class debate and create and write their own blogs. Many of the projects will take an interdisciplinary approach to enhance the overall learning experience.

TROUBLESHOOTING AND COMMUNICATION (FA1.601.4)

INVENTING THE FUTURE STANDARDS

Students will be able to communicate effectively in a variety of media, including both written and oral. Students will also be able to troubleshoot/debug problems and learn how to explain their setbacks and solutions to teach others.

PREREQUISITE

None.

ROBOTICS 602 **STEAM**

0.5 CREDIT HOURS

This course introduces students to basic robotics and electronics through hands-on use with EV3 Mindstorm robots and Arduino kits. Students will develop proficiency in building electronic circuits, reading and drawing schematic diagrams, and writing code in Arduino's IDE software language. An understanding of the equipment and programming are developed through laboratory experiences. Scientific practices are assessed through formal lab reports.

In addition to Academic Initiative, students earning credit in Robotics will satisfactorily complete the following standards:

ROBOTICS STANDARDS

CONCEPTUAL KNOWLEDGE (FA1.ROBOTICS.1)

Students will have an understanding of basic robotics, electrical circuits and coding that will aid them in building their own prototypes. Students will research fields that use technology and related areas to broaden their understanding of the social and economic impact of technology.

DESIGN (FA1.ROBOTICS.2)

Students will be able to design robotics and/or circuits to solve problems or replicate real world use of technology. They will be able to sketch and read schematic diagrams for electrical circuits. Students will learn to be creative and practical problem solvers.

ENGINEERING AND CIRCUITRY (FA1.ROBOTICS.3)

Students will be able to build their own robotics and/or electrical circuits. Students will need to use their understanding of the equipment and their design to build successful robots and/or circuits.

COMPUTER PROGRAMMING (FA1.ROBOTICS.4)

Students will learn basic computer programming using the open source Arduino IDE. Students will use this programming language to code Arduino Uno boards and RedBot boards to perform different tasks. Students will understand how to use functions, create and use variables, add if/else statements, etc.

PREREQUISITE

None.

CODING WITH SWIFT 609A

0.5 CREDIT HOURS

Coding with Swift will introduce the fundamentals of coding used in a variety of applications. Some topics to be covered include functions, strings, lists, interface design, loops, conditionals and debugging. Students will apply their knowledge to solve relevant problems. Best practices in coding will be assessed through labs, problem sets, and group work.

In addition to Academic Initiative, students earning credit in Coding with Swift will satisfactorily complete the following standards:

CODING STANDARDS

CODING BASICS AND FUNCTION (FA1.CODING.1)

Students will learn about basic operators and commands, creating new functions, nesting functions and simple methods of debugging through solving mathematical and scientific problems. Students will have to use their creative problem solving skills to find solutions to such problems.

Topics include:

- Programming as a formal language
- Basic operations
- Variables, expressions, and statements
- Intro to functions

INTERFACE DESIGN (FA1.CODING.2)

CODING STANDARDS

Students will become familiar with interface design. Students will gain an understanding of the types of functions and commands required to create common displays and simple design. For loops will be studied to aid in simplifying code for repetitive tasks as well as other techniques to make code more concise and easier to read.

FLOW CONTROL AND CONDITIONALS (FA1.CODING.3)

Students will learn boolean expressions to use within if statements to control what lines of code are executed in a program. They will also learn about fruitful functions and return values to produce more useful functions within the moduli they create. The while statement will be explored in the context of iteration to create more effective and concise code.

STRINGS AND LISTS (FA1.CODING.4)

Students will become familiar with indices, slicing sequences, string, and list methods, the “in” operator, string comparison, reading word lists, list operations, and several new related functions. Students will enhance their ability to understand flow of execution and debugging through reading other people’s code.

PREREQUISITE

None.

SOCIAL STUDIES

GRADUATION REQUIREMENT

To graduate from Foxcroft Academy, students must earn credit in Intro to Global Politics, American History A, American History B, and one Social Studies elective course.

REQUIRED COURSES

HONORS INTRO TO GLOBAL POLITICS 234

INTRO TO GLOBAL POLITICS CP 235

INTRO TO GLOBAL POLITICS 236

1.0 CREDIT HOURS

This course focuses on the important themes and concepts in comparative governments and the influence of geography in different regions of the world. Specific cases studies will include: the United States, Mexico, the United Kingdom, Nigeria, Russia, the People's Republic of China, and Iran. Cross-country comparisons will be made throughout the semester.

In addition to Academic Initiative, students earning credit in Intro to Global Politics will satisfactorily complete the following standards:

GLOBAL POLITICS STANDARDS

COMPARATIVE GOVERNMENTS (FA1.POL.1)

Students will compare and contrast political concepts, themes, and generalizations of multiple countries. They will also learn the strengths and weaknesses of different countries and how they compare to each other in past and modern times.

KNOWLEDGE OF CORE COUNTRIES (FA1.POL.2)

Students will be required to understand basic components of individual core countries. These components include: political figures, electoral processes, laws, and past history. They will have to distinguish between countries that include: the United States, Great Britain, Mexico, and Nigeria.

GEOGRAPHY (FA1.POL.3)

GLOBAL POLITICS STANDARDS

Students will study the patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students will employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. Students will examine geography and its influence on the development of culture and government. Beginning with the United States, students will use what they learn about different regions of the world to compare, contrast, and critically analyze international relationships.

CRITICAL THINKING (FA1.POL.4)

Students will analyze, interpret, reflect their personal opinions on topics ranging from world current events to individual themes of different countries in the modern era. Students will use the avenues of formal debate and argumentative essays to support their claims for specific topics.

WRITING AND ANALYSIS (FA1.POL.5)

To meet the Writing and Analysis standard students will be required to respond to a historical question by developing a thesis and then analyzing reliable sources to support or prove their position. Source citations and written expression will be taken into consideration in meeting this standard.

PREREQUISITE

None.

AMERICAN HISTORY STANDARDS

In addition to Academic Initiative, students earning credit in American History Courses will satisfactorily complete the following standards:

AMERICAN HISTORY STANDARDS

***ORIGINS AND EVOLUTION OF THE AMERICAN POLITICAL SYSTEM
(FA1.HIS.1)***

Political systems originate from a need to protect a society from both internal and external threats. The need creates a set of legal institutions that constitute a government. The seeds were sown for the American political system almost as soon as the first British colonists landed on American soil. Historically the American government has changed and evolved yet has still retained its original fundamental principles. Meeting this standard requires that students comprehend American government and its political parties. This comprehension includes identifying reasons for change in the American political system and understanding how the multi-tiered American governance operates. Students will evaluate differing interpretations of the Constitution as well as distinguish the opposing perspectives of political parties.

WAR AND REBELLION: CAUSES AND CONSEQUENCES (FA1.HIS.2)

War is the most brutal example of inhumanity, and since the beginning of time man has repeatedly taken up arms against its fellow human beings. The consequences of war are often dire, therefore, circumstances that lead to a breakdown of diplomacy are worth understanding. To meet this standard students will be made to evaluate, analyze, and understand the motives for those wars (declared and undeclared) for which the United States has engaged. As part of understanding conflict students will be asked to examine the perspectives of all belligerents involved. Students will then be asked to apply what they have learned to current United States foreign relations issues.

DEFINING AMERICAN CAPITALISM (FA1.HIS.3)

Economic systems are important to a nation because it determines how a country and government will distribute resources. The evolution of the American economic system can be seen as a shift along a spectrum ranging from command to a complete free market system. To meet this standard students must evaluate why the American economic system, focused on private ownership of property (capitalism), shifts over time. This will include, but is not limited to, Hamilton's Treasury, protectionism vs. free trade, industrialization, Progressivism, and how to effectively deal with booms and busts in the business cycle. Students will be asked to examine this evolution by comparing and contrasting our current capitalist system with that of the past.

CHALLENGES OF AMERICAN CULTURAL DEVELOPMENT (FA1.HIS.4)

The history of United States has been defined by its constantly evolving culture. Immigration patterns, race, ethnicity, gender, technology, capitalism, and political ethos have all contributed to this cultural transformation. This ever changing environment has elicited an identity crisis which has prompted many challenges to this “experiment in democracy”. Students will be required to evaluate the American cultural evolution, as well as discern its influence on populist movements, reform efforts, and activist groups that have challenged American social, institutional, and cultural norms.

WRITING AND ANALYSIS (FA1.HIS.5)

To meet the Writing and Analysis standard students will be required to respond to a historical question by developing a thesis and then analyzing reliable sources to support or prove their position. Source citations and written expression will be taken into consideration in meeting this standard.

AMERICAN HISTORY A 225

AMERICAN HISTORY A CP 224

1.0 CREDIT HOURS

This course is a study of American History beginning with European Colonization and concluding with the Populist movement associated with the Gilded Age (1880’s).

In addition to Academic Initiative, students earning credit in American History A will satisfactorily complete the following standards:

- Origins and Evolution of the American Political System (FA1.HIS.1)
- War and Rebellion: Causes and Consequences (FA1.HIS.2)
- Defining American Capitalism (FA1.HIS.3)
- Challenges of American Cultural Development (FA1.HIS.4)
- Writing and Analysis (FA1.HIS.5)

PREREQUISITE

Successful completion of Intro to Global Politics.

AMERICAN HISTORY B 229

AMERICAN HISTORY B CP 228

1.0 CREDIT HOURS

This course is a study of American History beginning with the Spanish-American War and concluding with the end of the Cold War.

In addition to Academic Initiative, students earning credit in American History B will satisfactorily complete the following standards:

- Origins and Evolution of the American Political System (FA1.HIS.1)
- War and Rebellion: Causes and Consequences (FA1.HIS.2)
- Defining American Capitalism (FA1.HIS.3)
- Challenges of American Cultural Development (FA1.HIS.4)
- Writing and Analysis (FA1.HIS.5)

PREREQUISITE

Successful completion of American History A.

ADVANCED PLACEMENT COURSES

AP MACROECONOMICS 294



2.0 CREDIT HOURS

Students will develop a thorough understanding of macroeconomics in preparation for the AP exam. This course is aligned with the College Board standards for Macroeconomics and is recommended for those seeking entrance into the nations most competitive colleges and Universities, or interested in pursuing a finance/business related degree. Strong scores on the College Board exam may earn students placement out of an introductory college requirement or possibly college credit. The AP exam is mandatory and the cost is borne by the student (financial assistance is available on an as needed basis).

In addition to Academic Initiative, students earning credit in AP Macroeconomics will satisfactorily complete the following standards:

AP MACROECONOMICS STANDARDS

FOUNDATIONS OF ECONOMICS (FA1.294.1)

Students will learn basic Macroeconomic concepts such as scarcity, opportunity costs, specialization, supply and demand, inflation, and unemployment. They will also learn how to use basic models to express their understanding of these concepts.

MEASUREMENT OF ECONOMIC PERFORMANCE (FA1.294.2)

There are indicators that measure Macroeconomic performance that include unemployment, inflation, and GDP. Students will learn how to calculate and interpret these means of measurement.

MACROECONOMIC THEORY AND POLICY (FA1.294.3)

There are certain policies and theories prevalent to Macroeconomics. They include, but are not limited to Fiscal Policy, Monetary Policy, Comparative and Absolute advantage, Phillips Curve, and Multiplier Effect. The theory will provide a basis for understanding policy.

THE INTERNATIONAL ECONOMY (FA1.294.4)

The economy of any nation is increasingly tied to a globalized economy. Students will learn the basics of international exchange, why nations trade, and the advantages and disadvantages of international trade.

PREREQUISITE

Successful completion of American History A or Department Head approval.

AP MICROECONOMICS 293



2.0 CREDIT HOURS

Students will develop a thorough understanding of microeconomics in preparation for the AP exam. This course is aligned with the College Board standards for Microeconomics and is recommended for those seeking entrance into the nations most competitive colleges and Universities, or interested in pursuing a finance/business related degree. Strong scores on the College Board exam may earn students placement out of an introductory college requirement or possibly college credit. The AP exam is mandatory and the cost is borne by the student (financial assistance is available on an as needed basis).

In addition to Academic Initiative, students earning credit in AP Microeconomics will satisfactorily complete the following standards:

AP MICROECONOMICS STANDARDS

FOUNDATIONS OF ECONOMICS (FA1.293.1)

Students will learn basic Microeconomic concepts such as opportunity costs, scarcity, supply and demand, market equilibrium, and producer and consumer surplus. They will learn how to develop and analyze economic models in order to show their knowledge of the basic concepts listed above.

FUNCTIONS OF PRODUCT AND FACTOR MARKETS (FA1.293.2)

Students will learn how consumers and producers make choices through marginal analysis. They will analyze how consumer's utility and producer's costs impact their choices.

FIRM BEHAVIOR AND MARKET STRUCTURE (FA1.293.3)

Students will evaluate how the market structure impacts a firm's profit maximization point and efficiency. The market structures that students will be responsible for are perfect competition, monopoly, monopolistic competition, and oligopoly.

MARKET FAILURE AND ROLE OF GOVERNMENT (FA1.293.5)

Students will evaluate how externalities, public goods, and income inequality can make a market fail and analyze how these failures can be solved through government intervention.

PREREQUISITE

Successful completion of American History A or Department Head approval.

INTERNATIONAL BACCALAUREATE COURSES

IB HISTORY OF THE AMERICAS HL IB230A



2.0 CREDIT HOURS / YEAR (2 YEAR COURSE)

Students may enroll in Year 1 independently of Year 2. Year 1 will meet both the Foxcroft Academy graduation requirements for American History B and the Social Studies elective.

Year 1: "Causes and Effects of 20th-Century Warfare"

Year 1 of this course will center on the causes and consequences of 20th-century conflict. The 20th century was arguably the most violent in the history of man and the 21st century continues to be shaped by it. There is much to be learned from these events and therefore it's worth understanding not only what caused these catastrophic events, but also the consequences of them.

Students may enroll in Year 2 independently of Year 1. Year 2 will meet the Foxcroft Academy graduation requirement for the Social Studies elective.

Year 2: “History of the United States”

Year 2 of this course will focus more on the history of the United States. This includes an in-depth study of slavery and the “new world”, the American Civil War, and post-1945 social movements that include, but are not limited to, the civil rights movement and the modern feminist movement.

Both Year 1 and Year 2 sub-courses require students to complete a 2200-word research paper.

<i>IB HISTORY OF THE AMERICAS HL STANDARDS</i>
<i>WRITING AND ANALYSIS (FA1.HIS.5)</i>
To meet the Writing and Analysis standard students will be required to respond to a historical question by developing a thesis and then analyzing reliable sources to support or prove their position. Source citations and written expression will be taken into consideration in meeting this standard.
<i>SETTING THE STAGE FOR WAR (FA1.230A.1)</i>
<i>THE COSTS OF WAR (FA1.230A.2)</i>
<i>CONSEQUENCES OF THE PEACE (FA1.230A.3)</i>
<i>GEOGRAPHY (FA1.230A.4)</i>

PREREQUISITE

Successful completion of Intro to Global Politics and American History A at the CP or Honors level.

ELECTIVE COURSES

ECONOMICS 287

ECONOMICS CP 286



1.0 CREDIT HOURS

This course is designed to introduce students to the basic principles and theories of economics. Students will study concepts and principles such as supply and demand, markets and prices, fiscal and monetary policy, inflation, interest rates, and how they apply to every day life in a capitalist society. There is also a personal finance component to this class.

ECONOMICS STANDARDS

MICROECONOMICS (FA1.ECON.1)

The branch of economics that studies behavior and decision-making by small units such as individuals.

MACROECONOMICS (FA1.ECON.2)

The discipline of economics that studies economies as a whole and decision making by large units such as governments.

PERSONAL AND CONSUMER FINANCE (FA1.ECON.3)

Study of financial management by an individual or family. Topic will include how to budget, save, and spend financial capital.

PREREQUISITE

Successful completion of American History A.

ECONOMICS OF SPORTS 295



1.0 CREDIT HOURS

This economics course will use empirical analysis to study the economics of sports. This course is data driven and uses statistical analysis to dig deeper into sport related topics. Topics may include: history of data-driven sports analysis; forecasting and predicting team and individual performance; the effect of home field advantage; the economics of professional sports teams; how does team chemistry positively (or negatively) effect a team; relationship between performance and how much they are paid.

In addition to Academic Initiative, students earning credit in Economics of Sports will satisfactorily complete the following standards:

ECONOMICS OF SPORTS STANDARDS

REGRESSION ANALYSIS (FA1.295.1)

ECONOMICS OF SPORTS STANDARDS

Regression analysis is the statistical process for estimating the relationships among variables usually to learn the causal affect of one variable on another. Students will be expected to be able to conduct their own regression analysis by constructing hypotheses and testing them using this technique.

SOCIAL ANALYSIS (FA1.295.2)

Social analysis is examining a social issue or trend in connection with the regression analysis. Students will be expected to examine the impact of their findings as a result of their regression analysis.

HISTORICAL AND ECONOMIC ANALYSIS (FA1.295.3)

Students will examine the history of regression analysis in sports. Students will examine the historical components to their hypotheses, in support of answering questions such as: Why did sports stars start getting paid more? Why did they start skipping high school to join the pros? What are the historical and economic driving forces behind these trends?

WRITING AND ANALYSIS (FA1.295.4)

To meet the Writing and Analysis standard students will be required to respond to a historical question by developing a thesis and then analyzing reliable sources to support or prove their position. Source citations and written expression will be taken into consideration in meeting this standard.

PREREQUISITE

Successful completion of American History A.

HONORS INTERNATIONAL RELATIONS 292



1.0 CREDIT HOURS

This course is designed for students who have a special interest in world affairs. It will include a comparative analysis of varying world economic and governmental systems in light of contemporary issues. Systems will include European, Asian, and African as well as American. Significant reading, writing, and research are strong components of the course. Participation in the University of Southern Maine's Model United Nations is required. This program entails an overnight stay on the USM campus and rigorous competition with students from other schools around the state. A portion of the cost of the Model United Nations is borne by the student.

In addition to Academic Initiative, students earning credit in Honors International Relations will satisfactorily complete the following standards:

<u>INTERNATIONAL RELATIONS STANDARDS</u>
<i>HISTORIC AND CURRENT EVENTS (FA1.292.1)</i>
Students explore historic and current events as they are related to MEMUNC topics.
<i>PUBLIC SPEAKING (FA1.292.2)</i>
Students will practice Public Speaking through debates, presentations, and parliamentary procedure.
<i>WRITING AND ANALYSIS (FA1.292.3)</i>
Students demonstrate ability to apply facts discovered through research for position papers, reflections on current events, and analysis as the result of research.
<i>COUNTRY AND COMMITTEE RESEARCH (FA1.292.4)</i>
Students will use research skills to discover facts about MEMUNC topics and countries.
<i>MEMUNC PERFORMANCE (FA1.292.5)</i>
Student performance is assessed at the Maine Model United Nations Conference (MEMUNC).

PREREQUISITE

Successful completion of American History A at the CP or Honors level of study. Senior standing, or by instructor permission.

PSYCHOLOGY 260



HONORS PSYCHOLOGY 262

1.0 CREDIT HOURS

This course provides students with a basic understanding of the subject and careers that can be pursued within the field. The 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 will be exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students will also learn about the ethics and methods psychologists use in their science and practice.

In addition to Academic Initiative, students earning credit in Psychology will satisfactorily complete the following standards:

PSYCHOLOGY STANDARDS

HISTORICAL AND THEORETICAL (FA1.PSY.1)

- A recognition of the diversity of individuals who advance the field
- An awareness that psychological knowledge, like all scientific knowledge, evolves rapidly as new discoveries are made
- An acknowledgement that psychology explores behavior and mental processes of both human and non-human animals
- An understanding that different content areas within psychological science are interconnected
- A knowledge of the variety of careers available to those who study psychology

APPLIED AND SOCIOLOGICAL (FA1.PSY.2)

- An ability to relate psychological knowledge to everyday life
- An appreciation that psychological science and knowledge can be useful in addressing a wide array of issues, from individual to global levels
- A multicultural and global perspective that recognizes how diversity is important to understanding psychology
- Social cognition/influence
- Perspectives on abnormal behavior
- Aging and its components
- Different types of learning (classical, operant, cognitive)

RESEARCH AND SCIENTIFIC (FA1.PSY.3)

- An awareness of the importance of drawing evidence- based conclusions about psychological phenomena
- An appreciation for ethical standards that regulate scientific research and professional practice
- Encoding, storage, retrieval of memory
- Categories of psychological disorders
- Research methods, measurements, and statistics

PREREQUISITE

Successful completion of American History A.

WORLD LANGUAGE AND CULTURE

GRADUATION REQUIREMENT

To graduate from Foxcroft Academy, students must earn credit in at least one World Language and Culture course.

WORLD LANGUAGE STANDARDS

In addition to Academic Initiative, students earning credit in World Language courses* will satisfactorily complete the following standards:

<u>WORLD LANGUAGE STANDARDS</u>
<i>INTERPERSONAL COMMUNICATION (FA1.WL.1)</i>
Learners interact and negotiate meaning in spoken, signed, or written conversations to share information, reactions, feelings, and opinions.
<i>INTERPRETIVE COMMUNICATION (FA1.WL.2)</i>
Learners understand, interpret, translate and analyze what is heard, read, or viewed on a variety of topics.
<i>PRESENTATIONAL COMMUNICATION (FA1.WL.3)</i>
Learners present information, concepts, and ideas to inform, explain, persuade, and narrate on a variety of topics using appropriate media and adapting to various audiences of listeners, readers, or viewers.
<i>LANGUAGE COMPARISONS (FA1.WL.4)</i>
Learners use the language to investigate, explain, and reflect on the nature of language through comparisons of the language studied and their own.
<i>CULTURE (FA1.WL.5)</i>
Learners use the target language and their native language to investigate, explain, and reflect on food, music, customs, religious practices and other aspects of cultures of the peoples and nations studied.

* Please note that Latin does not have Interpersonal Communication.

FRENCH

INTRODUCTION TO FRENCH 518

1.0 CREDIT HOURS

Focuses on the fundamental elements of the French language with a cultural context. Emphasis is on vocabulary and study skills required for World Language acquisition. This course is designed for students who desire more background information before diving into practical use of the language in the Novice French I CP and/or Honors classes.

PREREQUISITE

None.

NOVICE FRENCH I CP 510A

1.0 CREDIT HOURS

This beginning French course stresses the active use of the language with the goal of communicative proficiency through the five language skills of speaking, listening, reading, writing, and culture. The study of language requires an investment of time and energy, and active and verbal participation is a must.

PREREQUISITE

None.

HONORS NOVICE FRENCH I 524A

1.0 CREDIT HOURS

This course provides the students with the opportunity to develop listening, speaking, reading and writing skills in the French language. Oral skills are developed through the rigorous use of appropriate language, technology, dialogues and hands-on learning activities. Students will be introduced to many aspects of the French culture. Active and verbal participation in French while learning is required.

PREREQUISITE

Teacher recommendation or approval.

NOVICE FRENCH II CP 512A

1.0 CREDIT HOURS

This course is an advancement of Novice French I. The primary aim of the course is to strengthen and expand the five basic language skills. Students will study the cultural aspects of the French-speaking world. Active use of the language to improve proficiency is required.

PREREQUISITE

Successful completion of Novice French I.

HONORS NOVICE FRENCH II 525A

1.0 CREDIT HOURS

In this course, the students will continue to develop their French language skills. Oral skills will continue to be emphasized along with an in-depth study of French grammar. The students continue to develop a better understanding of the French speaking world and cultures. Active and verbal participation is required.

PREREQUISITE

Successful completion of Honors Novice French I or teacher approval.

HONORS INTERMEDIATE FRENCH III 526A

1.0 CREDIT HOURS

This course builds on the communication skills acquired in Novice French I and II. Continued use of authentic documents, contemporary film, and literature are integral to the attainment of a higher degree of proficiency in all skill areas. Active use of the language is required in this advanced-level course.

PREREQUISITE

Successful completion of Novice French II. Recommended final grade of B- or better.

HONORS INTERMEDIATE FRENCH IV 527A

1.0 CREDIT HOURS

The student selecting this course must have a good command of the basic language skills and be highly motivated to improve his/her level of proficiency in the language. Cultural material will be presented and vocabulary expanded through selected readings and online

resources. It is expected that students commit to the daily use of the language in class. Active use of the language is required in this advanced-level course.

PREREQUISITE

Successful completion of Honors Intermediate French III. Recommended final grade of B- or better.

GERMAN

INTRODUCTION TO GERMAN 570

1.0 CREDIT HOURS

This course serves not only as an introduction to the basics of the German language, but also to the German culture and history. Emphasis will be placed on practical language skills and students will learn everyday communication. Basic vocabulary acquisition, familiarity with grammar, along with the reading of simple texts will sport conversational practice. Assessments will include projects, in-class role-playing, worksheets, vocabulary tests, and simple translations. The standards for World Languages will be the standards assessed.

PREREQUISITE

None.

GERMAN I 570A

1.0 CREDIT HOURS

German I continues the work begun in Introduction to German, but is more rigorous in its focus on vocabulary acquisition, skill in use of declensions and conjugations, and practice in speaking, reading, writing and listening. Material for the class will be comprised of textbook activities, German websites and videos, in-class readings and discussions, while students will be expected to complete out-of-class assignments on a regular basis.

PREREQUISITE

None.

LATIN

INTRO TO LATIN

Salvete amici! Intro to Latin lays the foundation for the Latin series: Intro, Latin I, Latin II, Latin III and Latin IV. Topics for study include Latin grammar, Latin vocabulary and derivatives, and Roman Culture. Building a strong foundation for your future language studies, this course meets every other day for the entire school year. Grounded in grammatical forms and syntax, this method acts as a bridge between other primary languages and English. Students are encouraged to join FAJCL (FA's Junior Classical League) and participate in conventions and competitions throughout the year.

PREREQUISITE

None.

LATIN I CP 556

HONORS LATIN I 520

1.0 CREDIT HOURS

Students will complete the standard progression of beginning Latin grammar and syntax: the five noun declensions and four conjugations in the Present & Perfect systems. Building vocabulary is a key component this semester as we practice more complex translations. Translating from an inflected language (one governed by endings) into English can help clarify sentence structure and improve writing skills throughout your studies. Students are encouraged to join FAJCL (Junior Classical League) and participate in conventions and competitions throughout the year. Students are also encouraged to take the National Latin Exam in March.

PREREQUISITE

Successful completion of Intro to Latin.

LATIN II CP 557

HONORS LATIN II 521

1.0 CREDIT HOURS

Latin II continues the study of Latin, completing the specific study of Latin grammar preparing the student for more complex translations encountered in Advanced Latin courses. Increasing vocabulary and gaining a deeper understanding of Classical Civilization are integral parts of this course. Students are encouraged to join FAJCL (Junior Classical League) and participate in conventions and competitions throughout the year. Students are also encouraged to take the National Latin Exam in March.

PREREQUISITE

Successful completion of Latin I.

LATIN III: HISTORY AND CULTURE 522A

1.0 CREDIT HOURS

This Advanced Latin course focuses on translating great Roman authors. A variety of prose authors will be explored each semester, such as Julius Caesar, Cicero, Livy and Ovid. Roman history, government, and politics are studied through the original Latin writings, adapted writings and the context of their composition.

Each semester is divided into three components: individual portfolio, class translations and Roman culture. Individual portfolios will allow each student to design an individual exploration of the Roman people with concentrations like the study of Livy's histories, the rhetoric of Cicero or the Gallic Wars of Caesar. Students are strongly encouraged to participate in the Maine Junior Classical League and to sit for the National Latin Exam.

PREREQUISITE

Successful completion of Latin II. Recommended final grade of B- or better.

LATIN IV: LITERATURE AND CULTURE 523A

1.0 CREDIT HOURS

This Advanced Latin course focuses on translating great Roman authors. A variety of poetry and prose authors will be explored each semester, such as Julius Caesar, Cicero, Catullus and Ovid. Roman culture is studied through the original Latin writings, adapted writings and the context of their composition. Roman Literature reveals the culture and history of the Republic and the Empire, as the free citizens of the Republic learn to exist under the emerging Empire.

Each semester is divided into three components: individual portfolio, class translations and Roman culture. Individual portfolios will allow each student to design an individual exploration of the Roman people with concentrations like the study of Catullus' poems, Vergil's Aeneid or Cicero's philosophical writings. Students are strongly encouraged to participate in the Maine Junior Classical League and to sit for the National Latin Exam.

PREREQUISITE

Successful completion of Latin II. Recommended final grade of B- or better.

SPANISH

INTRODUCTION TO SPANISH 529

1.0 CREDIT HOURS

This is action-based course designed to acquaint first-time learners of Spanish with basic vocabulary, and the study skills necessary for language acquisition. In addition, the context of this course includes the interweaving of culture with vocabulary to introduce the students to the Hispanic world. This course is designed for students who desire more background information before diving into the practical use of the language in the Novice Spanish I CP and/or Honors classes.

PREREQUISITE

None.

NOVICE SPANISH I CP 530A

1.0 CREDIT HOURS

This beginning Spanish course stresses the active use of the language with the goal of communicative proficiency through the five language skills of speaking, listening, reading, writing, and culture. Students are expected to use Spanish as a means of communication within and beyond the classroom. The study of language requires investment of time and energy and a commitment to fulfilling the requirements of the course.

PREREQUISITE

None.

HONORS NOVICE SPANISH I 536A

1.0 CREDIT HOURS

Students will cover more than in the traditional Novice Spanish I class, at a rigorous and accelerated rate, with expanded vocabulary, grammar, and cultural experiences. Those completing Honors Novice Spanish I will, with teacher approval, be eligible for Honors Novice Spanish II. Honors students are expected to use the target language as often as possible.

PREREQUISITE

Teacher recommendation or approval.

NOVICE SPANISH II CP 531A

1.0 CREDIT HOURS

This course is a continuation of Novice Spanish II. The primary aim of this course is to strengthen and expand the five basic language skills acquired in Novice Spanish I. Students will study the cultural aspects of the Spanish-speaking world. Active use of the language to improve proficiency is required. Students will participate in cultural activities and work on projects related to the Spanish-speaking world.

PREREQUISITE

Successful completion of Novice Spanish I.

HONORS NOVICE SPANISH II 537A

1.0 CREDIT HOURS

Students will be expected to cover more than traditional Novice Spanish II with the addition of more reading, listening, writing and speaking activities, focusing on real world situations and current events. It includes a rigorous program of grammar, writing, reading and speaking in preparation for Honors Intermediate Spanish III.

PREREQUISITE

Successful completion of Honors Novice Spanish I or teacher approval.

HONORS INTERMEDIATE SPANISH III 538A

1.0 CREDIT HOURS

Honors Intermediate Spanish III builds on the communicative skills acquired in levels one and two. Continued use of authentic documents and contemporary film and literature are integral to the attainment of a higher degree of proficiency in all skill areas. Active use of the language is required in this advanced-level course.

PREREQUISITE

Successful completion of Novice Spanish II. Recommended final grade of B- or better.

HONORS INTERMEDIATE SPANISH IV 539A

1.0 CREDIT HOURS

The student selecting Honors Intermediate Spanish IV must have a good command of the basic language skills and be highly motivated to improve his/her level of proficiency in the language. Cultural material will be presented and vocabulary expanded through selected readings and online resources. It is expected that students commit to the daily use of the language in class. Active use of the language is required in this advanced-level course.

PREREQUISITE

Successful completion of Honors Intermediate Spanish III. Recommended final grade of B- or better.

ELECTIVES

These courses do not meet the World Language graduation requirement.

EXPLORING HISPANIC LANGUAGE AND CULTURE 929

0.5 CREDIT HOURS

This course will explore the Latin American Countries and Spain through colloquial language, culture, culinary, and creative venues. The approach to learning will be “hands-on”, including project-based activities. Projects will include culinary investigations of different Hispanic foods as well as art to assist student cultural understanding.

In addition to Academic Initiative, students earning credit in this course will satisfactorily complete the following standards:

EXPLORING HISPANIC LANGUAGE AND CULTURE STANDARDS

CREATION AND EXPRESSION (FA1.CUL.1)

Students will generate and conceptualize artistic ideas and work. They will understand that artists and designers experiment with forms, structures, materials, concepts, media, and art-making approaches.

CULTURAL KNOWLEDGE AND CONNECTIONS (FA1.CUL.2)

Students will understand and demonstrate comprehension of objects, information, artifacts, and artworks collected, preserved, or presented either by artists, museums, or other venues that communicate meaning and a record of social, cultural, and political experiences and cultivate appreciation and understanding.

AESTHETICS AND CRITICISM (FA1.CUL.3)

Through engagement with the appearance and quality of artworks, students will develop individual aesthetic and empathetic awareness, to understand and appreciate self, others, the natural world, and constructed environments.

PREREQUISITE

None.

INTERNATIONAL BACCALAUREATE COURSES

IB World Language courses develop student proficiency in the following standards:

IB WORLD LANGUAGE STANDARDS

CONTEXTUAL COMMUNICATION (FA1.IBWL.1)

Communicate clearly and effectively in a range of contexts and for a variety of purposes. (Interpersonal/presentational)

INTERCULTURAL COMMUNICATION (FA1.IBWL.2)

Understand and use language appropriate to a range of interpersonal and/or intercultural contexts. (Interpersonal/Culture/language comparisons)

INTERACTIVE COMMUNICATION (FA1.IBWL.3)

Understand and use language to express and respond to a range of ideas with fluency and accuracy. (Interpretive/presentational)

IB WORLD LANGUAGE STANDARDS

PRESENTATIONAL (FA1.IBWL.4)

Identify, organize and present ideas on a range of topics. (Presentational)

ANALYTICAL COMMUNICATION (FA1.IBWL.5)

Understand, analyze and reflect upon a range of written, audio, visual and audio-visual texts. (Interpretive/presentational)

IB FRENCH AB INITIO SL IB527

1.5 CREDIT HOURS / YEAR (2 YEAR COURSE)

Students may enroll in Year 1 independently of Year 2. Year 1 will meet the Foxcroft Academy graduation requirement of a World Language course. Students must have successfully completed Year 1 in order to continue in Year 2.

IB French *ab initio* is a two-year course that has been designed for students who don't have any prior experience learning the target language. The language *ab initio* course is arranged into three themes: Individual and Society, Leisure and Work, and Urban and Rural environment. Each theme has a list of topics that provide the students with opportunities to practice and explore the language as well as to develop intercultural understanding. Through the development of receptive, productive and interactive skills, students will be able to respond and interact appropriately in a defined range of everyday situations. In addition, students will organically learn to acquire basic grammar concepts.

The main focus of the course is on the acquisition of language required for purposes and situations usual in everyday social interactions. French *ab initio* aims to develop a variety of linguistic skills and a basic awareness of the culture. In addition, students will explore life in French-speaking countries through various media including clips from films, music, authentic texts, such as letters, articles and emails, as well as authentic resources from the internet.

PREREQUISITE

None, though prior exposure to French is recommended.

IB SPANISH AB INITIO SL IB539

1.5 CREDIT HOURS / YEAR (2 YEAR COURSE)

Students may enroll in Year 1 independently of Year 2. Year 1 will meet the Foxcroft Academy graduation requirement of a World Language course. Students must have successfully completed Year 1 in order to continue in Year 2.

IB Spanish *ab initio* is a two-year course that has been designed for students who don't have any prior experience of learning the target language. The language *ab initio* course is arranged into three themes: Individual and Society, Leisure and Work, and Urban and Rural environment. Each theme has a list of topics that provide the students with opportunities to practice and explore the language as well as to develop intercultural understanding. Through the development of receptive, productive and interactive skills, students would be able to respond and interact appropriately in a defined range of everyday situations. In addition, students will organically learn to acquire basic grammar concepts.

The main focus of the course is on the acquisition of language required for purposes and situations usual in everyday social interactions. Spanish *ab initio* aims to develop a variety of linguistic skills and a basic awareness of the culture. In addition, students will explore life in Spanish-speaking countries through various media including films, music, authentic texts and the internet such as letters, articles and emails.

PREREQUISITE

None, though prior exposure to Spanish is recommended.

INDUSTRIAL TECHNOLOGY

Industrial Technology course offerings provide students an opportunity to explore interests while earning credit that counts toward the STEAM and/or Electives graduation requirement.

In addition to Academic Initiative, students earning credit in an Industrial Technology course will satisfactorily complete Technology standards. The Industrial Technology standards are described below and the standards measured by each course are noted below the course description.

INDUSTRIAL TECHNOLOGY DEPARTMENT STANDARDS

MEASUREMENT (FA1.TECH.1)

The student will understand and demonstrate measurement skills.

- Use measurement tools and units appropriately.

COMMUNICATION (FA1.TECH.2)

Students will communicate effectively in science and technology.

- Use journals and self-assessment to describe and analyze scientific and technological experiences and to reflect on problem solving processes.
- Make and use appropriate symbols, pictures, diagrams, scale drawings, and models to represent and simplify real-life situations and solve problems.
- Employ graphs and tables in making arguments and conclusions.
- Critique models, stating how they do and do not effectively represent .

TECHNICAL SKILLS (FA1.TECH.3)

Students will complete tasks using appropriate technology.

- Use appropriate tools, materials, procedures and supplied equipment to complete an assigned task.

INQUIRY AND PROBLEM SOLVING (FA1.TECH.4)

Students will apply inquiry and problem solving approaches in science and technology.

- Make accurate observations using appropriate tools and units of measure.
- Verify, evaluate, and use results in a purposeful way. This includes analyzing and interpreting data, making predictions based on observed patterns, testing solutions against the original problem conditions, and formulating additional questions.
- Recognize, extend, and create patterns and cycles using concrete products and examples of data and ideas or theories.
- Demonstrate ability to use scientific inquiry and technological method with short term and long term investigations, recognizing that there is more than one way to solve a problem and knowing when to try different strategies.

HEALTH PROMOTION AND RISK REDUCTION (FA1.TECH.5)

Students will understand how to reduce their health risks through practicing healthy behaviors.

- Analyze the role of individual responsibility for enhancing health and safety in the community and the workplace.
- Demonstrate strategies to avoid and reduce unsafe and threatening situations.

ECOLOGY (FA1.TECH.6)

Students will understand how living things depend on one another and on non-living aspects of the environment.

- Illustrate the cycles of matter in the environment and explain their interrelationships.
- Illustrate the cycles of matter (carbon, nitrogen and water) and show and explain their interrelationships.

AUTOMOTIVE

EXPLORING SMALL ENGINES 468



0.5 CREDIT HOURS

This course will give the student an understanding of all of the internal and external engine parts of a Briggs and Stratton small engine as well as basic two and four cycle engine theory, and maintenance. Lab activities will include disassembly, inspection, and assembly of a

Briggs and Stratton engine. As soon as the student has shown classroom proficiency they will work on a Briggs and Stratton overhead valve engine; similar to those available as lawn mowers, snowblowers, rototillers and generators.

In addition to Academic Initiative, students earning credit in Exploring Small Engines will satisfactorily complete the following standards:

Communication Skills (FA1.TECH.2)

Technical Skills (FA1.TECH.3)

Inquiry and Problem Solving (FA1.TECH.4)

Health Promotion (FA1.TECH.5)

PREREQUISITE

None.

INTRO TO AUTO MAINTENANCE 464



0.5 CREDIT HOURS

This course will give students a basic understanding of what is going on under the hood of their vehicle. Students will learn how to maintain a vehicle properly, what to look for in used cars, how to buy parts, what is required for state inspection and general car care.

In addition to Academic Initiative, students earning credit in Intro to Auto Maintenance will satisfactorily complete the following standards:

Communication Skills (FA1.TECH.2)

Technical Skills (FA1.TECH.3)

Health Promotion (FA1.TECH.5)

PREREQUISITE

Driver's permit or license.

AUTO MAINTENANCE TECHNOLOGY 465



0.5 CREDIT HOURS

This course has a more in-depth look at all the systems that make up an automobile. The student will learn how to remove, rebuild, and/or replace automotive components, but they will focus on projects that they would be able to complete on their own, in the future. The student will be encouraged to have his/her own projects to work on during the shop portion of the class.

In addition to Academic Initiative, students earning credit in Auto Maintenance Technology will satisfactorily complete the following standards:

Technical Skills (FA1.TECH.3)

Inquiry and Problem Solving (FA1.TECH.4)

Health Promotion (FA1.TECH.5)

PREREQUISITE

Successful completion of Intro to Auto Maintenance.

ADVANCED AUTO MAINTENANCE TECHNOLOGY 466



0.5 CREDIT HOURS

This course deals with the rebuilding of major automotive components such as engines, transmissions, and differential assemblies. The student will learn about drivability tests, and computerized engine and body controls.

In addition to Academic Initiative, students earning credit in Advance Auto Maintenance Technology will satisfactorily complete the following standards:

Technical Skills (FA1.TECH.3)

Inquiry and Problem Solving (FA1.TECH.4)

Health Promotion (FA1.TECH.5)

PREREQUISITE

Successful completion of Auto Maintenance Technology.

ENGINEERING

ARCHITECTURAL DRAWING AND DESIGN I 458



0.5 CREDIT HOURS

If you have ever thought of designing your own house, camp, or living space, this course is for you! Basic emphasis will be placed on developing fundamental architectural drawing skills and techniques including the design process, architectural plans, and support services. Plans will be made by using drawing instruments and computer aided drawing.

In addition to Academic Initiative, students earning credit in Architectural Drawing and Design I will satisfactorily complete the following standards:

Measurement (FA1.TECH.1)

Communication Skills (FA1.TECH.2)

Technical Skills (FA1.TECH.3)

Inquiry and Problem Solving (FA1.TECH.4)

This course counts as an Arts course.

PREREQUISITE

None.

ELECTRICITY AND ELECTRONICS TECHNOLOGY 462



0.5 CREDIT HOURS

This course will cover Ohm's law, series and parallel circuits, electrical conductors, basic electrical diagrams and residential wiring. The lab portion of this course will consist of soldering, making splices, using an electronic solderless PC board, and setting up and wiring a "live" house model.

In addition to Academic Initiative, students earning credit in Electricity and Electronics Technology will satisfactorily complete the following standards:

Communication Skills (FA1.TECH.2)

Technical Skills (FA1.TECH.3)

Inquiry and Problem Solving (FA1.TECH.4)

Health Promotion (FA1.TECH.5)

PREREQUISITE

None.

ENGINEERING AND COMPUTER AIDED DRAWING (CAD) 457

0.5 CREDIT HOURS



This course is for those students who are planning to go into a technical design field or engineering. Emphasis will be placed on drawing skills enhanced by the use of the computer. Some of the areas covered are isometric and orthographic drawings, layouts, 3-views and auxiliary views.

In addition to Academic Initiative, students earning credit in Engineering and Computer Aided Drawing (CAD) will satisfactorily complete the following standards:

Measurement (FA1.TECH.1)

Communication Skills (FA1.TECH.2)

Technical Skills (FA1.TECH.3)

Inquiry and Problem Solving (FA1.TECH.4)

PREREQUISITE

None.

HOME ENGINEERING 479



0.5 CREDIT HOURS

This course is for students that will someday have their own home or apartment. Some of the areas covered will be: house types, real estate, deeds, electrical, plumbing, heating, appliances.

In addition to Academic Initiative, students earning credit in Home Engineering will satisfactorily complete the following standards:

Technical Skills (FA1.TECH.3)

Inquiry and Problem Solving (FA1.TECH.4)

Health Promotion (FA1.TECH.5)

PREREQUISITE

None.

HOW THINGS WORK 477



0.5 CREDIT HOURS

Have you ever wondered how a model rocket works or how a paper airplane stays afloat? This course is for students that have interest in finding out how everyday things do what they do. Students will take apart, build and create many objects in this course. Research techniques and safety are also covered in class.

In addition to Academic Initiative, students earning credit in How Things Work will satisfactorily complete the following standards:

Technical Skills (FA1.TECH.3)

Inquiry and Problem Solving (FA1.TECH.4)

Health Promotion (FA1.TECH.5)

PREREQUISITE

None.

PRINCIPLES OF ENGINEERING 478



0.5 CREDIT HOURS

This is an introductory course for anyone planning to go into the many fields dealing with engineering. This course includes the many phases of engineering design. The basic emphasis will be placed on the design process in solving problems.

In addition to Academic Initiative, students earning credit in Principles of Engineering will satisfactorily complete the following standards:

Technical Skills (FA1.TECH.3)

Inquiry and Problem Solving (FA1.TECH.4)

Health Promotion (FA1.TECH.5)

PREREQUISITE

None.

WELDING

EXPLORING WELDING 469



0.5 CREDIT HOURS

This course will give the student an understanding of the safety and use of several welding and cutting processes. Topics covered and equipment used will include DC arc welding (SMAW), oxy-fuel cutting, and plasma cutting. Students will be using different welding rods, while working with multiple welding positions. There will be an in-depth oxy-fuel safety seminar and certificate offered by a CWE welding safety professional.

In addition to Academic Initiative, students earning credit in Exploring Welding will satisfactorily complete the following standards:

Communication Skills (FA1.TECH.2)

Technical Skills (FA1.TECH.3)

Health Promotion (FA1.TECH.5)

PREREQUISITE

None.

WELDING II 467



0.5 CREDIT HOURS

As a continuation of Exploring Welding, the class will concentrate on safety and arc welding with the use of DC stick, MIG, gas and gas-less wire feed welding(GMAW), and TIG welders

as well as oxy fuel cutting, gouging, and heating and plasma cutting. Students will be using several different welding rods and wires, while working with multiple welding positions.

In addition to Academic Initiative, students earning credit in Welding II will satisfactorily complete the following standards:

Measurement (FA1.TECH.1)

Technical Skills (FA1.TECH.3)

Health Promotion (FA1.TECH.5)

PREREQUISITE

Successful completion of Exploring Welding or by permission of the instructor.

FABRICATION 471



0.5 CREDIT HOURS

This class is the next step after Welding II. This class will put the safety and skills learned in Exploring Welding and Welding II to work. The students will be expected to work safely to design and build a project; either alone or with others. The student will be able to use a variety of welding processes as well as a variety of shop tools and equipment.

In addition to Academic Initiative, students earning credit in Fabrication will satisfactorily complete the following standards:

Measurement (FA1.TECH.1)

Communication Skills (FA1.TECH.2)

Technical Skills (FA1.TECH.3)

Health Promotion (FA1.TECH.5)

PREREQUISITE

Successful completion of Welding II or by permission of the instructor.

OTHER

GREENHOUSE MANAGEMENT 426



0.5 CREDIT HOURS

Greenhouse management will include seasonal seedling production and local food production during the fall, winter and spring months. Students will research appropriate species and growing methods. In addition, students will carry out work in a greenhouse setting.

In addition to Academic Initiative, students earning credit in Greenhouse management will satisfactorily complete the following standards:

Communication (FA1.TECH.2)

Technical Skills (FA1.TECH.3)

Inquiry and Problem Solving (FA1.TECH.4)

Health Promotion (FA1.TECH.5)

Ecology (FA1.TECH.6)

PREREQUISITE

None.

WOODWORKING 460



0.5 CREDIT HOURS

If you are interested in working with wood and expressing yourself through hands-on work, this course is for you. We will cover the safe use of hand tools and machines, project selection and design, layout, construction, assembly, finishing and much more.

In addition to Academic Initiative, students earning credit in Woodworking will satisfactorily complete the following standards:

Measurement (FA1.TECH.1)

Communication Skills (FA1.TECH.2)

Technical Skills (FA1.TECH.3)

Inquiry and Problem Solving (FA1.TECH.4)

Health Promotion (FA1.TECH.5)

This course counts as an Arts course.

PREREQUISITE

None.

INTRODUCTION TO INDUSTRIAL TECHNOLOGY 460A



0.5 CREDIT HOURS

This course splits half of the semester in the small engines shop and the other half of the semester in the woodworking shop. This will be a hands-on, introductory course where students will learn to use tools safely, proper shop behavior and procedures through the disassembly and examination of engines and the creation of a woodworking project.

PREREQUISITE

Permission of the instructor.

JOBS FOR MAINE'S GRADUATES (JMG)

Jobs for Maine's Graduates (JMG) course offerings provide students an opportunity to develop important skills for success in high school and beyond, while earning credit that counts toward the electives graduation requirement.

JMG ESSENTIALS 480

0.5 CREDIT HOURS

This class is required for ninth graders. JMG Essentials is intended to make the freshman's transition into Foxcroft Academy successful. JMG Essentials will focus on topics ranging from adjusting to high school life to skills for the future. Students will participate in a variety of activities including: career prep; research career interests; test-taking strategies; transcript analysis; high school policies / handbook; PowerSchool; use their email to communicate with teachers; hands-on activities; classroom discussions; class readings; projects; team building; group work. Essentials is designed to help students learn and develop new skills that will make them a success at Foxcroft Academy and into the future.

In addition to Academic Initiative, students earning credit in JMG Essentials will satisfactorily complete the following standards:

<u>JMG ESSENTIALS STANDARDS</u>
COMMUNICATION AND REASONING (FA1.480.1)
Students will learn communication skills, time management skills, and work on making decisions and setting goals.
PLANNING FOR YOUR FUTURE (FA1.480.2)
Students will learn about building a better person, career exploration and tracking, and educational planning and tracking.
FINANCIAL LITERACY (FA1.480.3)
Students will learn about budget, expenses, salaries and wages.

PREREQUISITE

None.

JMG 9 487

1.0 CREDIT HOURS

JMG 9 is a continuation of JMG Essentials and is an inquiry-based semester-long course designed for students to explore three main areas: themselves; careers; post-secondary education. This inquiry is done through a combination of individual and group work, utilizing research and the community as primary tools. Students will also build employment skills through mini-lessons during the semester.

PREREQUISITE

Specific permission, interview, application, and recommendation from guidance and JMG Specialist.

JMG 10-11 488

1.0 CREDIT HOURS

JMG 10-11 is designed and developed to provide a successful transition from school to career for JMG students at Foxcroft Academy. Students will be involved in career development, community service, financial literacy, career research, and communication. Through JMG 10-11, students should be able to demonstrate behaviors that reflect positive interpersonal skills and evaluate successful strategies to improve those skills to aid them in making successful career and life decisions.

PREREQUISITE

Specific permission, interview, application, and recommendation from guidance and JMG Specialist.

JMG 12 489

1.0 CREDIT HOURS

JMG assists students in graduating from high school and preparing them for the world of work. This is a competency-based curriculum in which students will learn basic skills, career development, job attainment, and retention. Students will learn how to write powerful resumes and cover letters to better their chances of getting a job. Aside from in-class tasks, students will be asked to actively participate in community service, focus on college

searches, recommendation profile, student profile, essay writing, FAFSA, college applications, interviewing, financial aid, scholarship searches and college campus visits. After graduation, the Job Specialist will follow-up on the JMG Seniors for 12 months to make sure they all achieve a positive outcome (full-time job, technical school, college, part-time job, etc.). Students must be willing and able to participate in every phase of the program.

PREREQUISITE

Specific permission, interview, application, and recommendation from guidance and JMG Specialist.

PERFORMING ARTS

GRADUATION REQUIREMENT

To graduate from Foxcroft Academy, students must earn one credit in the Arts (Performing and/or Visual). Many opportunities are provided for further elective study.

THEATER

In addition to Academic Initiative, students earning credit in a Theater course will satisfactorily complete the following standards:

<u>PERFORMING ARTS STANDARDS</u>
VISUAL ART LITERACY (FA1.920.1)
Illustrating an understanding of terms and techniques.
AESTHETICS AND CRITICISM (FA1.920.2)
Taking direction, and applying it to a given project.
EXPRESSION (FA1.920.3)
Performance (acting OR tech) in front of a crowd (rest of the class).
VISUAL CONNECTIONS (FA1.920.4)
Combining disparate elements of theater (actor, costume, lighting, etc.) into one cohesive show.

INTRO TO STAGECRAFT 920



0.5 CREDIT HOURS

In this semester-long course, students hone and refine their skills at live storytelling, and the modern technology involved. These skills include basic stagecraft, script reading, acting, using light to set a scene, live audio and sound effects, the design process, and crewing a show.

PREREQUISITE

None.

ACTING IN A MUSICAL 967



1.0 CREDIT HOURS

This class is very similar to Acting in a One Act Play, except that the focus is on the specifics of acting in a musical and performing in the FA musical production. Classes and rehearsals will be similar in terms of meeting times and frequency. Performances will take place on the Foxcroft Academy stage in mid-November.

PREREQUISITE

Instructor permission.

ACTING IN A ONE-ACT PLAY 966



1.0 CREDIT HOURS

The most accomplished student actors and technicians are brought together for an intensive rehearsal and production process, to be showcased in performances at Center Theatre, and culminating with participation in the MPA competition in early March.

PREREQUISITE

Instructor permission.

ACTING IN A THREE-ACT PLAY 998



1.0 CREDIT HOURS

This is a large-format theatrical production, both in terms of cast and crew, in which up-and-comers get the chance to work their craft alongside the best actors in the school, culminating in a multiple-performance engagement at the Center Theatre in the spring.

PREREQUISITE

Instructor permission.

MUSIC

In addition to Academic Initiative, students earning credit in a Music course will satisfactorily complete the following standards:

<u>MUSIC DEPARTMENT STANDARDS</u>
PERFORMANCE FA1.MUS.1

MUSIC DEPARTMENT STANDARDS

Students will practice and perform on their instrument improving tone, articulation, range, registers and proper performing technique.

IMPROVISATION, COMPOSITION, AND ARRANGEMENT FA1.MUS.2

Students will learn increasingly more advanced techniques to advance in the parts of this standard through practice using scales, key signatures, voice leading and tonality and sonority development.

THEORY AND NOTATION FA1.MUS.3

Students will gain working knowledge in major and minor scales, arpeggios, keys, dynamics and other musical conceptual knowledge and skill.

ANALYSIS AND EVALUATION FA1.MUS.4

Students will informally and formally assess and evaluate audio and video examples of music and self-assess their own performances both public and private for musical, theoretical and aesthetic quality.

INTERDISCIPLINARY AND CULTURAL RELATIONSHIPS FA1.MUS.5

Students will gain understanding of how culture impacts music and how music impacts culture.

BAND 955



1.0 CREDIT HOURS

Band is the primary instrumental ensemble at Foxcroft Academy for experienced players. The band performs in multiple concerts and occasionally performs at festivals in and out of the state. Pep band music is also performed at football and basketball games. The band also marches in the Memorial Day parades in Monson and Dover-Foxcroft. Practice on primary instrument(s) is crucial to individual musical development, hence it is factored into the student's final grade.

PREREQUISITE

Two years of experience on a traditional band instrument or permission of the music director.

CHORUS 951



0.5 CREDIT HOURS

Chorus is a course for anyone who enjoys singing and performing music. The course content of this class will include (but not be limited to) the following: learning and performing a variety of choral music, vocal production, proper rehearsal and performance practices, basic music theory and beginning sight-singing. Singing in all performances is required.

PREREQUISITE

None.

MUSIC FUNDAMENTALS 999



1.0 CREDIT HOURS

Students in this introductory to intermediate level course will learn music theory, ear training, music history, and composition.

PREREQUISITE

Band, or instructor permission.

PIANO I 961



0.5 CREDIT HOURS

In this class, students learn to play the piano while also gaining some knowledge of music theory and history.

PREREQUISITE

None.

PIANO II 961B



0.5 CREDIT HOURS

Students will further develop their skills to read music and play more difficult pieces. Intermediate repertoire, chords and major and minor scales will be studied. Students will be graded on in-class assignments, class participation, individual practice and final performance of approved piece.

PREREQUISITE

Successful completion of Piano I (Intro to Piano) or permission of the instructor.

GUITAR I 960



0.5 CREDIT HOURS

Students with little or no experience playing guitar will learn the skills necessary for playing simple songs. Elementary chords, scales in first position, and reading music written for guitar will be emphasized so that the student can begin playing alone or in an ensemble. Technical aspects of guitar and music theory will be studied, but the focus of the course is to develop facility playing the guitar.

PREREQUISITE

None.

GUITAR II 950



0.5 CREDIT HOURS

Students will study intermediate level chords and major scales. Technical aspects of the guitar and music theory will be developed more extensively with a focus on technique. Students will be graded on in-class assignments, class participation, ensemble performance.

PREREQUISITE

Successful completion of Guitar I (Intro to Guitar) or permission of the instructor.

GUITAR ENSEMBLE 949



1.0 CREDIT HOURS

This ensemble provides opportunities for developing guitarists, at varying levels, to read and continue reading, develop technical and interpretive facility, and deepen ensemble playing skills through experience. The ensemble will have opportunities to perform at the two major music program concerts, and to take part in guitar-program field trip / playing opportunities. The ensemble meets 2-3 times a week in the Music Room.

PREREQUISITE

Successful completion of Guitar II or instructor permission.

JAZZ BAND 956



1.0 CREDIT HOURS

Jazz Band is for the experienced player of traditional jazz instruments. There are multiple performances per year which include concerts and music festivals both locally and throughout the state.

The student will be expected to develop a practice regimen, complete listening assignments and learn fundamental theory concepts.

Practice on the primary instrument is crucial to the student's success and will be factored into the student's final grade.

PREREQUISITE

Two years of experience on a traditional jazz instrument, a required audition, or permission.

JAZZ IMPROVISATION I 952



1.0 CREDIT HOURS

This course is intended for the singer or instrumentalist who would like to develop skills and confidence as a soloist. Specific tunes used will be in the jazz genre but all musicians will benefit.

Students will learn Ionian, Dorian and Mixolydian modes as well as Pentatonic and Blues scales and related chords. They will play these on keyboard and their primary instrument or voice. The student will be expected to develop a practice regimen and memorize chords with a goal to be able to improvise on Short-form tunes, Bracket-able tunes and Blues forms. Emphasis will be on good time, good sound, and good concept.

This class is highly recommended for the serious musician or college-bound student and should be taken in preparation for (or concurrently with) improvisation in Jazz Band or Select Choir.

PREREQUISITE

Two years of experience on instrument or voice.

JAZZ IMPROVISATION II 974



1.0 CREDIT HOURS

Students will further develop their skills in soloing and will advance to longer tunes with more involved chord structures.

Remaining modes (Phrygian, Lydian, Aeolian, and Locrian) will be covered as well as diminished and altered chords. The student will need to maintain a consistent practice routine to continue improving their skills.

Students will perform a solo including improvisation in Performance Class and an optional public concert.

PREREQUISITE

Jazz Improvisation I or permission of music director.

ORCHESTRA 962/ CHAMBER ENSEMBLE 958



1.0 CREDIT HOURS

This ensemble is for experienced musicians who play an orchestral instrument such as violin, viola, cello, double bass, clarinet, oboe, bassoon, flute, trombone, trumpet, French horn, tuba, or percussion. Ensemble material will be dependent on available instrumentation.

PREREQUISITE

Permission of the instructor.

PERCUSSION ENSEMBLE 937



1.0 CREDIT HOURS

The Percussion Ensemble is a relatively recent development in the field of music. The first purely percussion music was written in the 1920s, and since 1980 this medium has gained tremendous recognition throughout the country. In Percussion Ensemble, students will perform music specifically written for traditional pitched and non-pitched percussion instruments. Percussion Ensemble will also explore the nontraditional percussion music of “Stomp” and other “Stomp-like” ensembles. Students in the Percussion Ensemble are required to perform in all marching and pep band performances, as well as any concerts that will take place.

PREREQUISITE



Permission of the instructor.

ROCK BAND 973

0.5 CREDIT HOURS

Rock Band is a performance based ensemble with concentrations in music technology, sound, and light production. Students will learn how to start a band from the ground up. Knowledge will be gained in arranging, leading, rehearsing, and performing songs selected by the group and approved by the instructor. Students will perform as vocalists, instrumentalists, engineers, and lighting directors to produce their own rock concert for their adoring fans! Previous knowledge and ability on instruments and vocals is expected and a positive attitude is required.

PREREQUISITE

Priority enrollment given to students who have successfully completed Guitar II.

SELECT CHOIR 959



1.0 CREDIT HOURS

This advanced *a capella* group learns and performs a variety of challenging vocal arrangements.

PREREQUISITE

Permission of the instructor.

WOODWIND ENSEMBLE 975



1.0 CREDIT HOURS

Woodwind Ensemble is for any woodwind player interested in playing and performing in a small ensemble. All levels of musicianship are encouraged to participate. There will be a requirement to practice the material outside of class so all students will advance musically. The benefits will be improved sight-reading skills, intonation, blending and balance, and ability to keep time without a rhythm section. Participation in performances is required.

PREREQUISITE

Two years of experience on a woodwind instrument.

INTERNATIONAL BACCALAUREATE COURSES

IB MUSIC SL IB956

3.0 CREDIT HOURS (1 YEAR COURSE)



IB Music Standard Level develops musicians' knowledge and ability. Students are required to participate in Jazz Ensemble performing a variety of styles of instrumental music while studying musical cultures in depth from around the globe and throughout history. Theory, ear training, analysis, history and cultural will be studied to help develop a well rounded musician. Student should learn how to express themselves, analyze and understand the music of others, grow confident in musical terms and techniques and understand how music and the arts change from place to place and time to time.

PREREQUISITES

Band, Jazz Band and teacher permission.

DIPLOMA PROGRAMME STUDENTS WHO DO NOT MEET PREREQUISITES FOR MUSIC MUST ENROLL IN ENVIRONMENTAL SYSTEMS AND SOCIETIES.

VISUAL ARTS

GRADUATION REQUIREMENT

To graduate from Foxcroft Academy, students must earn one credit in the Arts (Performing and/or Visual). Many opportunities are provided for further elective study.

DIGITAL ARTS

DIGITAL PHOTOGRAPHY 938



0.5 CREDIT HOURS

This course is designed to teach students skills in digital photography and to gain knowledge of the art and science involved. Students will develop technical skills that lead to successful digital camera operation, as well as working knowledge of the language of photography. Students are taught how to create, manipulate, and optimize images for print and digital media using various software applications such as Adobe Photoshop. Students will explore the history of photography, camera settings, and digital image manipulation. Students will also explore personal style and standards of photography such as value, clarity, composition, and presentation. Students are required to have a camera card (8 gb minimum) and flash drive.

PREREQUISITE

Successful completion of Art.

INTRO TO FILM 611



0.5 CREDIT HOURS

This semester-long course provides students the opportunity to learn the motion picture production process, as well as gain experience using several tools of the trade. These tools, which include camera techniques, basic editing (both video and audio), and some special effects, will be learned in the process of the students creating their own short films, to be shown at the annual film festival.

In addition to Academic Initiative, students earning credit in Intro to Film will satisfactorily complete the following standards:

INTRO TO FILM STANDARDS

MEDIA LITERACY FA1.611.1

- Practical use of the techniques discussed in class

VISUAL COMMUNICATION FA1.611.2

- Clearly conveying a message or idea through a visual medium

TECHNICAL SKILLS FA1.611.4

- Maintaining and use of gear and equipment

PREREQUISITE

None.

FOXCROFT ACADEMY NETWORK (FAN) BROADCAST MEDIA 624A

STEAM



1.0 CREDIT HOURS

In FAN Broadcast Media, formerly Applied Media Production, students will work together to produce a wide range of dynamic multimedia content (Photos, Videos, and Writing) with the aim of disseminating this content in local newspapers, on Foxcroft Academy's website and social media sites, as well as providing live stream video broadcasting of Foxcroft Academy events (sports, music, drama, etc.). Simply put, we are the student eyes and ears of Foxcroft Academy. This will be a year-long course with occasional class meetings. Students will be expected to meet outside of class to complete assignments, and grades will be based upon duties and activities performed throughout the year.

In addition to Academic Initiative, students earning credit in FAN Broadcast Media will satisfactorily complete the following standards:

BROADCAST MEDIA STANDARDS

TECHNICAL SKILLS FA1.624.1

TECHNICAL INTEGRATION FA1.624.2

PROBLEM SOLVING FA1.624.3

RESEARCH FA1.624.4

PREREQUISITE

Students should demonstrate strong skills in at least one of the following areas: creative writing (including screenwriting), journalistic writing, photography, filmmaking, film editing, photo editing, graphic design, and/or visual arts.

YEARBOOK PRODUCTION 607



1.0 CREDIT HOURS

This course is designed for students who have an interest in producing Foxcroft Academy's 2013 yearbook. Students will be introduced to all key elements of good yearbook journalism including ladder diagrams, page layout and design, business basics, marketing and photography. Students will learn the value of good organizational skills in meeting deadlines. They will also sharpen their proofreading, writing, listening, speaking and viewing skills.

In addition to Academic Initiative, students earning credit in Yearbook Production will satisfactorily complete the following standards:

<u>YEARBOOK PRODUCTION STANDARDS</u>
TECHNICAL SKILLS FA1.607.1
Students will create the Yearbook using the digital tools and platform provided by the publisher. Students will learn how to upload, edit, and design pages for the yearbook.
TECHNICAL INTEGRATION FA1.607.2
Students will communicate and collaborate with peers, faculty, and community members to research, collect, curate, and create/transfer information in/into the digital platform for creating the Yearbook.
PROBLEM SOLVING FA1.607.3
Students will develop strategies and skills to overcome the challenges involved in creating the Yearbook, including technical aspects of production as well as sourcing information and interacting with the various people involved in the production process.
RESEARCH FA1.607.4
Students will explore, collect, evaluate, and share data, images, and other forms of media in the process of creating the Yearbook.

PREREQUISITE

None. Enrollment limited to senior students.

STUDIO ARTS

In addition to Academic Initiative, students earning credit in Studio Arts courses will satisfactorily complete the following standards:

<u>STUDIO ARTS STANDARDS</u>
<i>VISUAL ART LITERACY FA1.ART.1</i>
Students will generate and conceptualize artistic ideas and work. Art literacy investigates creativity and innovative thinking as essential life skills that can be developed. Students will investigate artistic styles that follow or break with traditions in pursuit of creative art making goals.
<i>AESTHETICS AND CRITICISM FA1.ART.2</i>
Students will develop aesthetic and empathetic awareness through engagement with art leading to understanding and appreciation of self/others, and constructed environments to include the appearance and quality of work. Measures ability to perceive and analyze the work of each assignment or project.
<i>EXPRESSION FA1.ART.3</i>
Organize and develop personal artistic ideas and work. Students will understand artists and designers by experimenting with forms, structures, materials, concepts, media, and art-making approaches.
<i>VISUAL CONNECTIONS FA1.ART.4</i>
Objects, information, artifacts, and artworks collected, preserved, or presented either by artists, museums, or other venues to communicate meaning and a record of social, cultural, and political experiences resulting in the cultivating of appreciation and understanding.

ART 945

0.5 CREDIT HOURS



The studio experience of making art, the history of the visual arts, and criticism of visual art forms will be presented at an introductory level. Art will be explored from two perspectives: its expressive qualities and its reflection of the society from which it comes. The elements of art (line, color, form/shape, texture, space and value) will be explored through a variety of

media. Painting and drawing, sculpture and ceramics will be explored. Emphasis will be on creative problem-solving and self-expression. History and criticism of visual arts will be integrated with studio experience.

PREREQUISITE

None.

INTRO TO AIRBRUSH 945A



0.5 CREDIT HOURS

This class is an entry-level course divided into easy to follow step-by-step units; each unit covers a key aspect that students need to learn. Students will gain an elementary Airbrushing language. They will also incorporate information regarding key aspects of airbrushing. This will help them to create artwork through special effects and core mechanics of Airbrushing.

PREREQUISITE

Successful completion of Art.

CERAMICS 946



1.0 CREDIT HOURS

This class is offered to students who are interested in pursuing both hand-building and wheel-thrown techniques. Students will explore high and low relief, slab building, extruding, drape molds and functional and nonfunctional wheel-thrown vessels. A variety of glazing techniques will also be explored.

Lab fee: \$10.00

PREREQUISITE

Successful completion of Art.

METAL SCULPTURE 932



0.5 CREDIT HOURS

Students will learn basic welding skills as well as shop, tool, and equipment safety. They will apply that knowledge to the process of creating metal artworks that incorporate the elements of art. Students will create a relief, individual sculpture, and a final group project.

PREREQUISITE

None.

STUDIO ART 944

1.0 CREDIT HOURS



This studio class prepares students in their sophomore and junior year for the Advanced Placement program. This course is designed to offer students who will be taking AP Art the opportunity to take a more in-depth approach to the Elements & Principles of Design. Students can also take this class as an advanced study of art techniques as mediums.

PREREQUISITE

Successful completion of Art or permission of the instructor.

AP STUDIO ART 941



1.0 CREDIT HOURS

This studio art class requires the creation of a 15 piece portfolio. Students follow and inquiry-based approach for their art that demonstrates a sustained investigation through practice, experimentation, and revision. This is met using both a journal and artwork created through this process.

Students will choose one of three major areas on which to focus: Drawing Portfolio, 2 Dimensional Design Portfolio, or 3 Dimensional Portfolio. This portfolio will serve as the Advanced Placement exam. College level quality is expected of all work and students will be presented with readings in art history as well as written and oral reviews of visuals. Performance scores from the College Board on the portfolio determine if the student's school of choice will grant college credit. Three finished projects reflecting a significant time commitment will be required for summer and will be due the first week of class.

Students are required to submit a 5 piece portfolio of their works to the College Board. There is a College Board fee for AP Studio Art. The cost is borne by the student, though fee reductions are available for students with financial need.

PREREQUISITE

Successful completion of Studio Art and/or permission of the instructor.

WELLNESS

GRADUATION REQUIREMENT

To graduate from Foxcroft Academy students must earn 0.5 credit in Health and must also earn 1 credit in Physical Education and/or Personal Fitness. In promotion of wellness, students may repeat Physical Education and/or Personal Fitness for credit.

HEALTH

HEALTH 904

0.5 CREDIT HOURS

This course offers a broad selection of health related topics to meet the needs, interests and backgrounds of all students. Topics include wellness, stress management, sexual harassment, domestic violence, CPR, best practices (sexuality), nutrition and eating disorders. American Heart Association CPR certification is available to those students who successfully complete the CPR unit.

In addition to Academic Initiative, students earning credit in Health will satisfactorily complete the following standards:

<u>HEALTH STANDARDS</u>
HEALTH CONCEPTS FA1.HEA.1
Students will demonstrate knowledge of health promotion and disease prevention concepts and how to use them.
HEALTH INFORMATION, SERVICES, AND PRODUCTS FA1.HEA.2
Students will demonstrate knowledge of how to acquire information about health risks through the practices of healthy behaviors.
HEALTH PROMOTION AND RISK REDUCTION FA1.HEA.3
Students will demonstrate knowledge of how to reduce their health risks through the practice of healthy behaviors.
INFLUENCES ON HEALTH FA1.HEA.4
Students will demonstrate knowledge of how media techniques, cultural perspectives, technology, peers, and family influence behaviors that affect health.
DECISIONS MAKING AND GOAL SETTING FA1.HEA.5

HEALTH STANDARDS

Students will demonstrate the ability to set personal goals and make decisions that lead to better health.

PREREQUISITE

None.

PHYSICAL ACTIVITY

LIFETIME PHYSICAL ACTIVITY 907

0.5 CREDIT HOURS

The primary aims of this course are to teach core physical skills, enhance knowledge about sports, exercise, and other forms of physical activity, and to develop immediate and lifelong benefits with enjoyment of physical activity. The class will be offered to students who are likely to benefit from a smaller class setting as well as the ability to have closer guidance while obtaining skills to promote lifelong learning.

PREREQUISITE

Permission of the instructor.

PERSONAL FITNESS 908

0.5 CREDIT HOURS

Personal Fitness is a physical education class for students who are ready to take an active role in improving their physical health. Students will engage in activities that improve muscular strength, muscular endurance, cardiovascular endurance, flexibility and body composition. Students will participate in fitness tests throughout the semester to monitor progress. Activities include: tennis, snowshoeing, resistance training, flexibility training, and cardiovascular activities. This course does not include any team sports.

In addition to Academic Initiative, students earning credit in Personal Fitness will satisfactorily complete the following standards:

PERSONAL FITNESS STANDARDS

PHYSICAL FITNESS FA1.908.1

PERSONAL FITNESS STANDARDS

- Participate in health related fitness assessments

KNOWLEDGE CONCEPTS FA1.908.2

- Demonstrate understanding of rules, gameplay/strategy
- Describe health concepts and fitness skills
- Explain relationship between fitness skills with lifelong health

MOTOR SKILLS FA1.908.3

- Demonstrate a variety of specialized motor skills specific to physical activity

PREREQUISITE

None.

PHYSICAL EDUCATION 901

0.5 CREDIT HOURS

Physical education activity units are designed to provide students with opportunities to acquire fundamental skills and knowledge of rules, strategies and principles of movement. Instruction and participation in team sports satisfy the immediate needs and interests of the students. In addition, their future needs are anticipated and planned for through the teaching of lifetime activities. Activities include fitness assessments, archery, badminton, floor hockey, ultimate frisbee, tchoukball, volleyball, and pickle-ball.

In addition to Academic Initiative, students earning credit in Physical Education will satisfactorily complete the following standards:

PHYSICAL EDUCATION STANDARDS

PHYSICAL FITNESS FA1.901.1

Students will regularly and consistently participate in the physical activities of the class at expected levels of performance.

MOTOR SKILLS FA1.901.2

Students will develop and demonstrate proficiency in the skills required to participate in the physical activities of the class at the expected levels of performance.

PERSONAL AND SOCIAL BEHAVIOR FA1.901.3

Students will demonstrate knowledge of the rules of the physical activities of the class and will demonstrate respect for self and others while participating in class activities.

PREREQUISITE

None.

SPECIAL EDUCATION

The Special Education Department provides direct instruction and/or support services to students with an Individualized Education Plan (IEP). All graduation requirements in English, Mathematics, Science, Social Studies, and other areas are offered at the Basic Level as determined by a student's IEP team.

The method of instruction, pacing or material shall be modified as appropriate to provide students identified as having special needs the differentiation to gain core knowledge and make progress in the general curriculum.

Enrollment in any Special Education course is by permission of the student's IEP Team.

CAREER PREPARATION

Small group instruction and community experiences are provided to students who need support in the areas of interpersonal communications (oral and written), social skills and pre-vocational training.

LIFE SKILLS

Functional life skills training includes community and school-based experiences such as personal management, consumer education, and community integration. Academics focus on literacy and math skills instruction at individualized levels. Communication and social skills development are emphasized.

STRUCTURED STUDY

Students who need alternative program supports are given direct instruction in a variety of skills to include time management, study skills and testing strategies. Specific skills in reading, writing and math are addressed.

TRI-COUNTY TECHNICAL CENTER (TCTC)

Tri-County Technical Center is a regional high school program providing occupational preparation courses. Participants attend classes at the Center and their high school on an every other day basis. Students are bussed to and from the Center by the school district. All students attending the Center complete an Employment Portfolio. Students earn three credits for each year of participation. All students have the opportunity to participate in SkillsUSA. Commercial Truck Driving students participate in a Maine State Vocational Truck Driving Competition.

PREREQUISITES

Successful completion of English I, English II, Algebra I, Conceptual Physics, Intro to Global Politics, and American History A.

The following program descriptions were provided by TCTC and are presented herein with permission:

TCTC AUTOMOTIVE TECHNOLOGY 986



3.0 CREDIT HOURS

The Automotive Technology Program is a NATEF Certified program that provides all high school junior and senior students the opportunity to start a very rewarding and demanding career in the automotive industry. Our program is designed to be the first step in making this a realistic goal for all highly motivated students that complete the two year program. All incoming students are required to complete a program shadow for one complete school day prior to enrollment.

All students will complete a rigorous safety training program including the online Safety and Pollution program as part of initial orientation into the program. With ever changing technology in this field, the employment opportunities continue to grow. Our program covers the following eight areas required by ASE: Steering and Suspension Systems, Braking Systems, Electrical, Heating/Air Conditioning, Drive trains, Automatic and Manual transmissions, and Engine Performance. Working with our ASE Master Technician Instructor, students will learn all of the entry level skills needed to start a career in the automotive field. Students spend one-third of the time in a classroom setting learning the fundamentals of automotive technology, diagnosis and repair, and developing a job skill

portfolio. The remainder of class time is used to complete real work projects by servicing and repairing both manufacturers donated and customers' vehicles. Students use the latest automotive computer diagnostic tools and computerized automotive information systems to assist in these repairs. Many students continue their education in related fields, at technical colleges, or other automotive training facilities.

The mission of the Automotive Technology program is to provide educational opportunities to individuals that will enable them to obtain the knowledge skills and attitudes necessary to succeed in the field of automotive technology.

OUTCOMES

NATEF Diploma, AYES Internship, Safety and Pollution Certification, Snap On Multimeter Certification, Maine Oxy Certification.

TCTC BUILDING TRADES 983



3.0 CREDIT HOURS

The Building Trades Program instructs students in the skills associated with residential house construction. Students are involved in a variety of building projects within the community that provide hands-on experience at a job site. Building Trades students learn industry accepted practices for the use of hand and power tools, ladders, and standards of construction with an emphasis on safety. Students have the opportunity to learn basic building techniques involved in house construction, as well as develop their employability skills. Students who meet the requirements of the NCCER (National Center for Construction Education and Research) Content curriculum will have the opportunity to receive a transcript and be registered on a National Registration Database that will follow them during careers and is recognized by many construction companies in the United States. Students will also be exposed to construction practices and post secondary education opportunities through field trips and visits from colleges and industry representatives. Students also take pre- and post- test for NOCTI certification. Students may also earn OSHA 10 and 30 hour construction safety cards. Successful completion of the program provides students with entry-level skills and a strong base for further training in the field of Building Trades.

OUTCOMES

Competency Certificate, Skill Profile, NOCTI certificate, NCCER National Registry Transcript, and OSHA 10 and/or 30 Hour Safety Cards.

TCTC COMMERCIAL TRUCK DRIVING 981

3.0 CREDIT HOURS

The Commercial Truck Driving Program qualifies students to be tested by the State of Maine Department of Motor Vehicles for a CDL Class A and/or CDL Class B Commercial Driver's Permit and a CDL Class A and/or CDL Class B Commercial Driver's License, IF the requirements of mandated hours are met. Instruction is based on state laws, industry regulations, and equipment inspection required for licensing.

State of Maine standards for classroom and driving instruction are adhered to during the course. The Commercial Truck Driving student is required by the State of Maine and the Professional Truck Driving Institute of America to receive a specific number of training hours so repeated absences may lead to student dismissal from the program.

Federal law mandates that Commercial Drivers be pre-employment and random drug tested, students in the C.T.D Program will be required to submit to all required drug testing. Students must hold and maintain a valid Maine Driver's license in good standing and must be sixteen (16) years of age, according to recent revamped driving laws in Maine.

OUTCOMES

Competency Certificate, Skill Profile, Maine Commercial Drivers License (CDL) Class A or Class B with endorsements, MaineOxy Certification.

TCTC COMPUTER AIDED DESIGN



3.0 CREDIT HOURS

Computer Aided Design (CAD), is a one-year class that alternates every other day in TCTC. This is an introductory course in computer-aided drafting/design where students will be taught basic CAD commands, tools, multi-view drawing as well as dimensioning and annotation techniques. Students who successfully complete this class will be able to demonstrate basic concepts of the AutoCAD, SweetHome 3D, Tinkercad, Cura, and Inkscape software. Apply basic concepts to develop construction (drawing) technique. Demonstrate ability to manipulate drawings through editing and plotting techniques, as well as their understanding of geometric construction, the use of Blocks, Design Center, and Tool Palettes. Students will proficiently produce template drawings, 2D Orthographic Projections, demonstrate dimensioning concepts and techniques, while demonstrating their understanding of section and auxiliary views.

This course will equip students to seek further education and/or vocational positions in drafting, designing, engineering or as a project coordinator. Students will have the opportunity to earn certification in AutoDesk AutoCad.

OUTCOMES

Competency Certificate, Skill Profile, NOCTI Certificate, AutoDesk AutoCad Certification.

TCTC COMPUTER SYSTEMS TECHNOLOGY 978



3.0 CREDIT HOURS

This program is designed to help students build skills in IT and other areas of Computer Science. Students progress through a curriculum designed to prepare them for the CompTia A+ certification and AP Computer Science Principles. Eligible students can take the A+ and the AP Computer Science exams at the end of the year.

To supplement and augment components of the curriculum, students will also learn how to create a web page using HTML and CSS, build an app for the Android platform, program robotics, and some 3-D printing. If time allows, students will also participate in the online Harvard University “Intro to Computer Science” class that will grant students a certificate of completion if they perform given projects. In addition, students will be able to participate in dual/concurrent enrollments with Husson University and the Community Colleges.

Students in this program will learn specific IT skills and will receive exposure to the Computer Science fields (Internet, digital information, algorithms & programming, data and privacy, and building apps) so that they can gain a more clear picture of what the Computer Science field has to offer for careers and opportunities.

For best results, it is **STRONGLY** recommended that students have a computer they can use outside of TCTC and an Internet connection so that they can do the outside work that is expected of them.

Students will be expected to take the Comp Tia A+ test, do all work assigned in class and homework, and must be able to operate independently during lab times to engage themselves in their studies and related activities.

OUTCOMES

Competency Certificate, Skill Profile, NOCTI certificate, A+ Certification, AP Computer Science Principles, various badges, and exposure/competency levels in coding.

TCTC CRIMINAL JUSTICE 982

3.0 CREDIT HOURS

The Criminal Justice Program prepares students for an exciting and challenging career in the field of Law Enforcement, Criminal Investigations, and/or Forensic Science. Students in the Criminal Justice Program will get a broad overview of the criminal justice system. It will provide competency-based instruction in crime scene investigation, professional ethics, evidence handling, fingerprinting, case preparation, constitutional rights, court systems, emergency vehicle operation, and police combat shooting. Students also participate in ceremonial work and live fire training.

Students are expected to follow law enforcement unit procedures, wear a BDU (Battle Dress Uniform), and complete physical training. Parts of the physical training and curriculum are based on the Maine Criminal Justice Academy requirements. Many units are supported with federal, state and local law enforcement personnel.

The course is recommended for students interested in pursuing careers in Criminal Justice, Law Enforcement, or the Military.

OUTCOMES

Competency Certificate, Skill Profile, First Aid/CPR/AED certification

TCTC CULINARY ARTS 987



3.0 CREDIT HOURS

The Culinary Arts Program prepares students for work in the restaurant management/hospitality industry. Students learn the skills of operating a full service restaurant, which includes front of the house management, line cook, prep cook, dishwasher, a full service commercial bakery, and a part-time catering service. Students are given many real-life work opportunities by participating with various banquets, luncheons, and events. Food preparation, knife skills, sanitation procedures, presentation, and food service management are taught as well. Students learn to work in a teamwork atmosphere and are required to participate in all areas of the Culinary Arts program. They learn how to organize their work area and develop a clean-as-you-go approach to assigned tasks in the Culinary Arts kitchen. In addition, students learn extra skills such as how to carve pumpkins, make gingerbread houses, and prepare edible art with fruits and vegetables. Students explore and are

encouraged to pursue post secondary education and work placement in the Culinary Arts and Hotel/Restaurant Management fields.

OUTCOMES

Competency Certificate, Skill Profile, NOCTI Certificate, and National Sanitation ServSafe Certification

TCTC EMS TCTC15

3.0 CREDIT HOURS

The Emergency Medical Services program is based upon and adheres to the National Department of Transportation and the State of Maine guidelines for an Emergency Medical Technician at the basic level (EMT-B). It is designed to introduce you to a career that is both exciting and personally rewarding. This academically rigorous and physically demanding program emphasizes teamwork and effective communication skills. Students will be asked to demonstrate a positive attitude, outstanding attendance, and good moral characteristics.

Students must be able to meet the physical demands of the program, which include lifting, pulling, twisting, and turning. Students will need to provide proof of immunizations, including DPT, MMR, Varicella, and Tetanus. During the course of the program they will need to get a flu vaccine, Hepatitis B vaccine, and a TB test. Students will also be subject to a background check and random drug testing.

This course will be taught through didactic lecture and hands on demonstration, practical application settings and field internship. Reading assignments and on-line training are required within this program. The EMT-B candidate must maintain a grade point average of eighty percent (80%) or better in order to pass this course and be eligible to take the National Registry EMS written and psychomotor exam. Candidates will need to be competent in their skills and knowledge and will be evaluated throughout this program.

OUTCOMES

Competency Certificate, Skill Profile, NOCTI Certificate, EMT-Basic, Certification in BLS and First Aid for Healthcare Providers, 3 college credits through SMCC, other micro-credentials.

TCTC GRAPHIC DESIGN AND COMMUNICATIONS 976



3.0 CREDIT HOURS

The Graphic Design & Communications program provides self-paced, project based instruction and practice in the field of graphic arts and visual communication. Students learn digital imaging concepts and skills in a modern graphic arts lab while gaining valuable workplace skills such as dependability, resourcefulness, initiative, diligence, and interpersonal skills.

Students will gain experience in the following areas using the professional-level software packages of Adobe Illustrator, Adobe InDesign, and Adobe Photoshop: Project Management Skills, Design Skills, Research and Communication Skills and Technical Skills. Students will design several projects in class, for example: a digital photo collage, a logo, a business card, an advertisement, a brochure, a newsletter, a mini-yearbook, a career portfolio, flyers, newsletters, calendars and magazine covers.

Students may have the opportunity to apply those skills on “real” customer projects. Jobs may include business cards, photo IDs, brochures, advertisements, invitations, photo calendars, and more. Students have access to state-of-the-art equipment including digital cameras, scanners, high-speed printers, wide format printer, digital drawing tablets, and a 3-D scanner and printer.

OUTCOMES

Competency Certificate, Skill Profile, and Adobe Certified Associate Certification, NOCTI certificate, and three college credits in Photoshop I.

TCTC HEALTH OCCUPATIONS 985



3.0 CREDIT HOURS

Health Occupations is designed to be a career awareness course with skills learned for diverse medical jobs. Units of instruction include health career search, health and disease, anatomy and physiology, medical terminology, human growth and development, communication, health care responsibilities, and job seeking skills. Hibbard’s Skilled Nursing and Rehabilitation Center, Mayo Regional Hospital, and Sebesticook Valley Health provide sites for clinical experience. During clinical rotations, students apply skills learned in the classroom at local health care facilities. Students wishing to obtain state certification as a certified nurse assistant (CNA) may do so through this program. This program also offers certification in Basic Life Support including Automated External Defibrillator (AED) use and First Aid for Healthcare Professionals. For those students who are college bound, we also offer a college course in Medical Terminology in which students can earn three

college credits upon completion of the curriculum provided by Central Maine Community College. Students can also compete in SkillsUSA and put their skills to the test at the local, state, and national levels.

OUTCOMES

Competency Certificate, Skill Profile, Certified Nurse Assisting (CNA), Certification in BLS and First Aid for Healthcare Providers, NOCTI certificate, NOCTI college credit certificate, and three college credits in Medical Terminology.

TCTC METALS MANUFACTURING 980



3.0 CREDIT HOURS

The Metals Manufacturing Program prepares students for employment or post secondary education in metals production occupations. Through application of metal working skills, students learn the manufacturing process. Production work in the program is designed to teach skills in teamwork, problem solving, and human relations. Activities include: blueprint reading, Computer Assisted Drawing (CAD), precision layout and measurement, and the introduction and safe operation of various metal working equipment including grinders, band saws, drill presses, lathes, conventional and Computer Numerical Control (CNC) mills. There are also some basic welding and cutting operations performed.

OUTCOMES

Competency certificate, Skill Profile, MaineOxy Certification, and NOCTI Certificate.

TCTC MULTIMEDIA TCTC14



3.0 CREDIT HOURS

The Multimedia program will teach audio and video production in the age of the Internet. Students will learn state of the art equipment and software like the Sony PXW-FS5 4k video camera, DJI Phantom 3 Professional Drone, Steadicam Solo, Sennheiser wireless audio, and the full suite of Adobe CC applications. From pre-production and planning to production and post-production, the class will cover topics like script writing and storyboarding, cinematography, location sound recording, still photography, lighting, editing, and music. Today's variety of media will also be covered including producing recorded and live streaming video for YouTube, podcasting, documentary and feature films, event videography, and journalism. Legal issues and professionalism will also be studied.

Certification in Adobe Premiere will be available. Jobs for graduates would include camera operator, cinematography, lighting, location sound, video and audio editor, copy editor, music composer, boom operator, production assistant, and event videographer.

OUTCOMES

Competency Certificate, Skill Profile, NOCTI Certificate, Adobe Premiere Certification.

TCTC TECHNICAL FOUNDATIONS

3.0 CREDIT HOURS

The Pre-Technical Program is designed to provide regional 9th and 10th grade at-risk, hands-on learners a program designed to develop pre-technical skills, attitudes, and understandings leading toward graduation as "a responsible and involved citizen and a collaborative and quality worker." The focus of the program is renewable and sustainable energy sources.

OUTCOMES

Competency certificate, Skill Profile, MaineOxy Certification, and NOCTI Certificate.

APPENDIX

The following course lists are presented in order of appearance in this Course Guide.

ARTS ELECTIVE COURSES

The following courses may serve as an Art elective if not already counted toward another graduation requirement:

- Creative Writing 115
- Architectural Drawing and Design I 458
- Engineering and Computer Aided Drawing (CAD) 457
- Woodworking 460
- Intro to Stagecraft 920
- Acting in a Musical 967
- Acting in a One-Act Play 966
- Acting in a Three-Act Play 998
- Band 955
- Chorus 951
- Music Fundamentals 999
- Piano I 961
- Piano II 961B
- Guitar I 960
- Guitar II 950
- Guitar Ensemble 949
- Jazz Band 956
- Jazz Improvisation I 952

- Jazz Improvisation II 974
- Orchestra 962/ Chamber Ensemble 958
- Percussion Ensemble 937
- Rock Band 973
- Select Choir 959
- Woodwind Ensemble 975
- IB Music SL IB956
- Digital Photography 938
- Intro to Film 611
- Foxcroft Academy Network (FAN) Broadcast Media 624A
- Yearbook Production 607
- Art 945
- Intro to Airbrush 945A
- Ceramics 946
- Metal Sculpture 932
- Studio Art 944
- AP Studio Art 941

STEAM ELECTIVE COURSES

The following courses may serve as a STEAM elective if not already counted toward another graduation requirement:

SCIENCE & TECHNOLOGY

- AP Chemistry 430
- AP Physics 1 449

- IB Biology HL IB420
- IB Environmental Systems and Societies SL IB423
- Anatomy and Physiology 425
- Astronomy 909
- Forensics 445
- Inventing the Future 601
- Robotics 602
- Coding with SWIFT 609A
- Exploring Small Engines 468
- Intro to Auto Maintenance 464
- Auto Maintenance Technology 465
- Advanced Auto Maintenance Technology 466
- Exploring Welding 469
- Welding II 467
- Fabrication 471
- Greenhouse Management 426
- Woodworking 460
- Introduction to Industrial Technology 460A
- TCTC Automotive Technology 986
- TCTC Computer Systems Technology 978
- TCTC Health Occupations 985

ENGINEERING

- Architectural Drawing and Design I 458

- Electricity and Electronics Technology 462
- Engineering and Computer Aided Drawing (CAD) 457
- Home Engineering 479
- How Things Work 477
- Principles of Engineering 478
- TCTC Building Trades 983
- TCTC Computer Aided Design
- TCTC Metals Manufacturing 980

ARTS

- Architectural Drawing and Design I 458
- Engineering and Computer Aided Drawing (CAD) 457
- Woodworking 460
- Intro to Stagecraft 920
- Digital Photography 938
- Intro to Film 611
- Foxcroft Academy Network (FAN) Broadcast Media 624A
- Yearbook Production 607
- Metal Sculpture 932
- TCTC Culinary Arts 987
- TCTC Graphic Design and Communications 976
- TCTC Multimedia TCTC14

MATHEMATICS

- Algebra II CP 331

- Honors Algebra II 333
- Statistics 344A
- Statistics CP 344B
- Personal Finance 308
- Functions, Statistics, and Trigonometry CP 336
- Honors Precalculus 341
- AP Calculus AB 340
- AP Calculus BC 342
- AP Statistics
- IB Mathematics: Applications and Interpretation SL IB345