CROFTON HIGH SCHOOL

COURSE SELECTIONS 2020 – 2021   GRADE 9

LAST NAME _____   FIRST NAME _____   SIF# __ __ __ __ __ __

Core academic courses below are year-long and are taught at three levels: **Standard** – at grade level   **Honors** – above grade level   **Advanced** – (Advanced Placement) – well above grade level with additional academic challenges
Selection of the core classes listed below are based on teacher recommendations and performance data, including grades, assessment scores, etc.

CORE CLASSES										GRADUATION REQUIRED COURSES
English	Rec.	**Social Studies**	Rec.	**Science**	Rec.	**Math**	Rec.	**World Languages**	Rec.	
English 9 A09010/A09020		History of the US B20110/B20120		Environmental Science C65913/C65923		Daily Algebra I D18010/D18020		Chinese 1 E21010/E21020		Global Citizenship - Signature (1st semester) Last Name Alpha A – L X06110
								Chinese 2 E22010/E22020		
English 9 CT A09017/A09027		History of the US CT B20117/B20127		Environmental Science CT C65017/C65027		Daily Algebra I CT D18017/D18027		French 1 E11010/E11020		Global Citizenship - Signature (2nd semester) Last Name Alpha M – Z X06120
								French 2 E12010/E12020		
Honors English 9 A09710/A09720		Honors History of the US B20710/B20720		Honors Biology C26710/C26720		Algebra 1 (every other day) D27013/D27023		American Sign Language 1 E01010/E01020		All ninth graders should consider signing up for their Basic Technology credits in order to fulfill the graduation requirement. Options include Tech Ed quarter credits, Computer Science, and PLTW. See descriptions of available options on the back of this sheet.
								American Sign Language 2 E02010/E02020		
Access to English/ Daily English 9 W80410/A09032 W80417/A09037		Advanced Placement US History and Honors Historical Inquiry B50810/B50820 & B50719/B50729				Honors Geometry D28710/D28720		Spanish 1 E61010/E61020		
								Spanish 2 E62010/E62020		

Elective Information: Number your electives from 1-10, with 1 being your top choice, in the "#" columns below. Depending on interest, some electives will only be available **during first** semester **or only during second** semester. Some courses do require pre-requisites, noted as "PR" below and others require concurrent enrollment in other courses, noted as "CR" below. Some electives <u>must</u> be taken **both** semesters (all year). For year-long electives, classes run every other day during the first and second semester.

YEAR-LONG ELECTIVES – Each selection counts as one elective for first semester AND one elective for second semester

#	Elective Course	Rec.	#	Elective Course	Rec.	#	Elective Course	Rec.	#	Elective Course	Rec.	#	Elective Course	Rec.
	AP Human Geography B71810/B71820			Child Growth & Dev. TBD	N/A		Band 1 F70010/F70020	N/A		Yearbook 1 A40010/A40020			AVID 9 K19010/K19020	
				Chorus 1 F20010/F20020	N/A		Orchestra 1 F75010/F75020	N/A		H Dance Company L18710/L18720	Audition required		Principles of Accounting and Finance Q01010/Q01020	N/A

SEMESTER ELECTIVES

#	Elective Course	#	Elective Course	#	Elective Course	#	Elective Course	#	Elective Course	#	Elective Course
	Creative Writing A17010 or A17020		Science Research 1 C50010 or C50020		Fitness for Life L82010 or L82020		Foundations of Walking Wellness L51010 or L51020		Music Technology F83910 or F83920		Fashion Design 1 H30010 or H30020
	Journalism A14010 or A14020		*CATS – Career Expl. (during school day) T88010 or T88020		Foundations of Dance L02010 or L02020		Foundations of Art G19010 or G19020		Guitar 1-4 F09010 or F09020		
	Theatre Arts 1 A06010 or A06020		*CATS – Career Expl. PM		Found of Dance for Athletes L11010 or L11020		Photo &Digital Processes 1 (PR Found of Art) G35020		Piano & Keyboard 1-4 F13010 or F13020		Honors Nutrition A H10710 or H10720
	Media Production 1 A29010 or A29020		(Semester 1 only, after school, bus provided) T88011		Foundations of Team Sports (PR Fit for Life) L37020		Studio 1: 2D Art (PR Found of Art) G45020		Introduction to Microsoft Office Q50010 or Q50020		Honors Nutrition B (PR Nutrition A) H11720
	Student Leadership X42010 or X42020				Foundations of Strength and Conditioning (PR Fit for Life) L58020		Studio 1: 3D Art (PR Found of Art) G55020		Web Page Design (PR Intro to Micro Office) Q77920		Signature: Explorations 1 X07711 or X07721

CROFTON HIGH SCHOOL

BASIC TECHNOLOGY CREDITS – Technology Education, Computer Science, or Project Lead the Way

Technology Education Quarter Credits

Students will be able to choose from several options of quarterly classes to satisfy their Basic Technology graduation requirement. Descriptions for each quarterly class are listed in the chart below. Four options should be selected – two for each semester – to meet the minimum graduation requirement.

Semester 1	Semester 2	For Basic Technology, check (√) two options in the chart to the left in each column. The remaining two will serve as your alternates.
		M84041/2/3/4 |Engineering Design 0.25/qtr. This course introduces students to Problem Solving and the Engineering Design Process. This project-based approach will focus on solving engineering challenges. Areas of emphasis include lab safety, the Engineering Design Process, structures and forces, Universal Design, and hydraulics.
		M84141/2/3/4 |Designing & Prototyping 0.25/qtr. In this course students explore the function of design. First students will learn sketching and modeling techniques engineers and designers use to communicate their ideas. They will then use a photo editing software to explore design elements. Students will use their knowledge to design and create a prototype of a product that they be packaged and advertised.
		M84241/2/3/4 |Design for Manufacturing 0.25/qtr. This course introduces students to the fundamentals of manufacturing. Students learn basic manufacturing techniques. This hands-on approach to learning includes product design, fabrication and real-world business applications.
		M84341/2/3/4 |Flight in Action 0.25/qtr. In this course, students will gain an understanding of the principles and of flight through project-based learning. Students will learn to design and build aircraft, and how to test their designs by controlling flight. Societal impacts and career connections will also be explored.
		**M84441/2/3/4	Practical Programming 0.25/qtr.** This course introduces students to programming through robotic controllers and application. Students will be presented a problem that must be solved by designing, building and programming working models of a solution.
		**M84541/2/3/4	What's App-enin? 0.25/qtr.** This course will use the Engineering Design Process to build mobile apps. They will experience introductory computer science principles through a variety of puzzles and projects. There will be a final app challenge of their choosing that will showcase their knowledge and skills.

Computer Science

Students have two options of yearlong Computer Science courses in order to meet the Basic Technology graduation requirement.

Sem 1 and Sem 2	If electing one of the options below, please check (√) next to your selection.
	R06010/R06020 Foundations of Computer Science – Designed to introduce students to the breadth of the field of computer science through an exploration of engaging and accessible topics. It is designed to focus on the conceptual ideas of computing and help students understand why certain tools or languages might be used to solve particular problems. Includes the topics of robotics, Processing and Java, and cyber security.
	R04810/R04820 AP Computer Science Principles – This Advanced Placement course offers a multidisciplinary approach to teaching the underlying principles of computation. Introduces students to creative aspects of programming, using abstractions and algorithms, working with large data sets, understandings of the Internet and issues of cybersecurity, and impacts of computing that affect different populations. *This course requires PR of Algebra I and CR of Geometry.*

Project Lead the Way

The second, or 10th grade course, for the Project Lead the Way pre-engineering program, Principles of Engineering, also satisfies the basic technology credit requirement. Students should sign up for the 9th grade course, Honors Engineering Design, if they plan to complete the PLTW pre-engineering program. PLTW is a rigorous honors national pre-engineering program available for students with an interest in engineering and the dedication to apply themselves in high-level courses. Middle school math and science teachers will verify and sign-off in the block on the lower left of this registration sheet with their recommendation for students to enroll in this program. Students taking this course are expected to complete the entire five-course PLTW engineering program. **Note: Satisfactory completion of the 10th grade course, Principles of Engineering, satisfies the state mandated technology graduation requirement.**

Sem 1 & Sem 2	Teacher Rec.	If electing the course below, please check (√) the box to the left.
		M26710/M26720 Engineering Design (IED) – Develops students' problem-solving skills, with emphasis on visualization and communication skills using AutoCAD inventor 3-D modeling software. Units of study include: Intro to Design, Student Portfolio Development, Sketching & Visualization, Geometric Relationships, Modeling, Assembly Modeling, Model Analysis & Verification, Model Documentation, Presentation, Production, and Marketing.

STUDENT AND PARENT APPROVAL OF COURSES: Please note that courses and staffing are scheduled based on student course requests during the registration process. It is imperative that you and your student, with the aid of your student's teachers, carefully select appropriate courses that meet student's interest, completer program, and courses needed for graduation to minimize changes to the schedule once the new school year starts.

Parent/Guardian and student should sign below. Please understand that every attempt will be made to accommodate your child's schedule requests as long as enrollment and staffing allow.

Student Signature _____ Parent Approval _____ Date _____