Course Syllabus

Franklin High School	2020-2021

1 Course Overview

Course Title: Robotics 1 and 2

Instructor Name: Mr. Joe Rowe	Contact Info: Franklin Parents can make calls
Grade Level(s): 9, 10, 11, 12	
Credit Type: CTE, Computer Science	# of credits per semester: 0.5
Prerequisites : None, and no homework	

General Course Description: Students in this course will construct several robots and have fun hands on experience learning the foundations of hardware and software to control robots remotely or as self driving autonomous robots.

2 Course Details

Materials, Attendance Schedule, Content and Learning Expectations

Materials :

PPS Chromebook or home PC with MacOS or Windows OS 7/10

PPS provided Lego Mindstorms Kit, Students pick this up from the library at textbook checkout if the school is closed for reasons of COVID or other emergency. Kits must be returned by Jan 25th, 2021

Pen or Pencil and Notebook: By the second day of class please purchase an 80 page Journal - Spiral Notebook or Glued Composition Book.   Students should have at least one page of notes every day of class.   Students will grade their own notebook based on our class rubric. This includes but is not limited to these criteria: Pages should be in order, one page for every day of class. At the top of the page there should be a header and warmup questions and answers. Below the warmup should be 1/2 page of lecture notes or more. It should be readable.

Schedule:
Attendance is reported every day of school, Mon, Tues, Wed, Thursday, Friday.

Students are expected to do classwork 5 days a week.

Monday: Live	Tuesday:Async	Wed: Async	Thurs: Live	Friday: Async

Live class is 9:15am Mondays and Thursdays (5 day week) http://bit.ly/5FHS20C
         If there is a 4 day week here's the schedule http://bit.ly/4FHS20C

On Async days students work alone or call me on the Remind App to request a live zoom support meeting one to one.   On Async days students are expected to code for 30 minutes in our coding

practice tool known as Blackbird. Students can opt out of Blackbird and use any other coding camp or school.

If students can not do their work they can be marked present by many other means. Our class expectation is using the exit ticket daily on our LMS modules. Many other methods work as well: Send me a message on the remindApp or email - Students can follow any one of the the district methods for attendance listed in the district policy.   https://bit.ly/3kZkczZ
Content:

All course content is on our website: LMS.PPS.NET

Attendance and Grade work are at the top our modules in LMS

This is a project based course giving students a basic knowledge in programming software and putting together robotic hardware sensors and parts.   We will start off learning code in a practice code camp such as Blackbird or CodeHS.   Students do not need previous programming experience The vocabulary in our footnotes is also key content.

When you finish this class we invite you to take Robotics 3 and 4 . In advanced robotics our school goes to compete with other schools and build robots that are 17x17 inches in the global FTC challenge.   We offer 6 computer science electives. Coding 1/2 is the first year. Coding 3/4 is year 2 and the 3rd year of coding is Coding 5/6.   Taking 6 semesters years of these courses qualifies students for an extra Program of study status at high school graduation.

Differentiation/accessibility strategies and supports (TAG, ELL, SpEd, other):

The differentiation and assessment strategies used in this course are created to meet the needs of ALL learners (including TAG, ESL, Special Ed...)   I do not use high stakes summative assessments. I use some practice quizzes, but quiz questions are given on screen with feedback. All students may have as much time needed on anything that is graded and allowed retakes.   Late work is graded late, which means students must come to tutorial or call and make an appointment to submit late work in person.   Students are encouraged to use any and all tools suggested by parents, professionals or advocates.   Students may come in tutorial to develop projects or assignments that better fit their style of learning. Students who wish to go beyond our current lessons can find extensions and extra credit work on our LMS website.   Our website offers navigation in many different languages including but not limited to Spanish, Cantonese and Mandarin. I offer many videos, and students can turn on subtitles in English or other languages. I offer advanced extensions for students who complete the existing class work and want to extend their learning and talents.

3 Classroom norms and expectations:

All district expectations are here:
District legal policy known as the AUP. The Acceptable Use policy for use of technology: https://www.pps.net/Page/629 (click AUP)

District Student Rights & Responsibilities Handbook for students, Click English or other

https://www.pps.net/domain/1294

Franklin Handbook for students
http://bit.ly/fhshand2020

Mr Rowe's 9 classroom rules for online learning are listed below
1) Come on time, or check in every day you miss class or work! Exit ticket!
2) Start class alone with the quiet warm up, one new notebook page every day, type your name in chat when you enter.
3) Seek help in many ways, others want to help you
4) Only give your best work, behave so others can do the same and feel safe
5) Stay engaged in zoom. No eating on screen or on microphone.
6) Keep your home work area clean as possible, volunteer at home
7) Follow school wide rules in our handbook and our AUP
8) Complete work on time, late work graded late in person zoom, by appointment only
9) Do not listen to music while a teacher zoom is happening. This ban is only 1 hour a day, twice a week. You have 168 hours a week for music. Phone calls? Mute your camera and mic, keep them brief.

Mr. Rowe's 9 rules for face to face learning are:
1) Come on time
2) Start class alone with the quiet warm up, one new page every day, fill it up
3) Seek help in many ways, others want to help you
4) Only give your best work, behave so others can do the same and feel safe
5) No eating/drinking (capped water only) Food outside the doors, or standing at our food cart in the center of the room. Not in first/last 15 min.
6) Volunteer to keep the room clean, without asking, even a mess that's not yours
7) Follow school wide rules in our handbooks and our AUP
8) Complete work on time, late work graded late in tutorial only
9) Phones, earbuds and personal electronics away from your body at all times, only allowed if teacher flips sign to ok for that event.

The order of consequences if expectations are not followed: Silent or verbal reminder, loss of privilege, contact parent/guardian if the issue is not resolved. Students may need to create their own goal sheet and have parents sign it.

4 Evidence of Course Completion

Assessment of Progress and Achievement:

At the end of the semester your student will be given a transcript grade of A,B,C,D,F We follow the PPS policy for grading. The vocabulary in our footnotes is an essential part of our projects and assessments.

Those PPS policy links are here: http://bit.ly/FHSSBG   and

Progress Reports/Report Cards (what a grade means):

Semester transcripts are letter grades (and mailed home reports)
A - on our standards, your student has a mixture of half HP marks and half PR marks. Students may also have 100% to 50% HP marks
B - a student has 51% PR marks and a smaller percentage of HP marks
C - a student has 75% PR marks, and a smaller percentage of HP marks
D - a student has missed a major standard. In one standard their mark is DP or CP
F - a student has many standard where their mark is DP on 67%-100% of standards

Student Vue shows HP or other Marks!
HP - Highly Proficient - Your student did the work and showed evidence their knowledge of the issue is highly above average or the basic standard of someone who knows that skill

PR - Proficient - Your student did the work but evidence shows only they completed the work at the most basic level

CP - Your student may have done work, but it lacks evidence that the skill is proficient for our rubric, or what someone in the industry would accept as basic proficiency

DP - Your student may not have turned in work, or it was very incomplete for evidence the skill has been acquired

Career Related Learning Experience (CRLEs) and Essential Skills:
CTE students receive real-world, industry-relevant, hands-on learning experiences, both in the classroom and in the community where industry professionals share their skills and expertise to bring real-world authentic learning opportunities.

5 Communication with Parent/Guardian

Absent marks show up as "unexcused" . It should say "absent" but that does not happen. This is a long flaw in Parent VUE.

I ask guardians to help by using 3 apps below for grades and attendance:

1- Remind School Communication App and logon
2- Parent Vue app and Logon
3- Email yearly verification

1) Install the Remind App.   I ask that guardians and students go to the iTunes or Google Play App store and install the apps called

2) Install the Parent Vue App.   I ask that guardians and students go to the iTunes or Google Play App store and install the apps called "Parent Vue" or "Student Vue".

3) I ask guardians to update your info.   Guardians can use a desktop or laptop to complete the process known as "Yearly Verification" This 20 minute process allows all teachers to know the correct parent email names.   You can't do "yearly verification" on a mobile phone.
Open a web browser to : https://www.pps.net/Page/2341

Grades, Attendance: I ask that guardians and students go to the iTunes or Google Play App store and install the apps called "Parent Vue" or "Student Vue".

Footnotes: other info

The LMS is our website: http://lms.pps.net   It has help and videos for every lesson. Every college professor uses an LMS as a mandatory tool for students to find help.

Click here for the SUN Tutoring Request Link- Starting September 28. If you have any questions please contact Claudia Cedeno   mailto:ccedeno@impactnw.org
http://bit.ly/FHSSUN2020

Important vocabulary all students should have in notebooks: We use these for projects, rubrics, assessments: action blocks, autonomous, axle, beams, block coding, block programming, boolean variable, brake, brick, brick status light, coast, color sensor, comment, condition, connectors, controller, coordinates, data blocks, data types, data wire, declare, display block, F1 Key, file, flow blocks, folder, gear ratio, gears, gyro sensor, input, keyboard shortcuts, large motor, loop, loop interrupt, math blocks, medium motor, motor, numeric variable, output, play until finished, port, port view, random block, RJ12 cable, sensor, servo motor, switch, text block, text grid, text variable, touch sensor, ultrasonic sensor, usb cable, user guide, variable, variable read, variable write, wait block,