

Major Course Modification and New Course Proposal

Type of proposal:



Major modification to existing course



New Course

Proposed Course Title: Data Science		Content Area: Computer Science	
This course is designed for:		Length of Course:	
Freshman	Sophomores	☒ Juniors ☒ Seniors	☐ Middle School ☒ Full Year ☐ Semester ☐ Quarter ☐ Trimester
Prerequisites needed by students to take this course: C or better in College Prep Algebra 2 or Honors Algebra 2.			
What need(s) does this course address? How was the need identified and who was involved determining the need? Five years ago we started the AP Computer Science Principles class at SHS. It has been well attended. Our students have enjoyed high levels of success in this class, scoring well on the AP exam. We would like to extend computer / IT course offerings to even more students, especially those who may not want to take an AP level course. This course will add another option to the STEM course offerings at SHS. Industries of all types are hiring data scientists to analyze and highlight the hidden patterns in data. Tim Percoski and I identified this need for an additional non AP level computer science related class.			
Give a general overview of what this course will cover This course equips students with the essential skills of a data scientist which includes data collection, cleanup, transformation, analysis, and visualization This course will cover the following concepts: • Introduction to Data Science • Ethics, Privacy, Bias • Data types, strings, images • Data visualization • Data collection • Probability and inference • Defining functions • Research and viability			

Who designed this course?

This course has been designed by Bootstrap World as well as CodeHS.

What, if any, special background/training would the teacher need to instruct this course successfully?

The teacher should have knowledge in both Statistics and Computer Science. Teacher will need to attend a course specific professional development session prior to teaching it.

What, if any, implications does this course have on staffing, other curricular areas and or space?

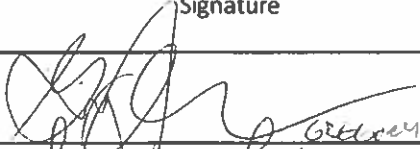
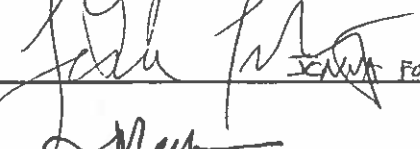
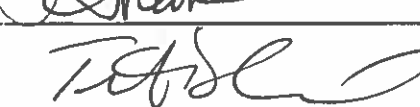
Teacher will need to teach this 1-year course. Current staffing could accommodate this. No additional classroom space is required.

Resources Needed for this Course:

Please list the materials/resources needed along with an estimated cost including PD.

<u>Materials/Resources</u>	<u>Cost</u>
Bootstrap World Professional Development	To be determined
CodeHS seat licenses	To be determined

Signatures below indicate that the course proposal has been discussed and feedback has been elicited on the proposal prior to completion. Interdisciplinary proposals require the signatures of members of all involved in those content areas/departments.

Signature	Content Area
 Gregory Jackson	COMP SCI, MATH
 James Fortin	Math
 Principal	
 6-12 STEM IL	


Dana McFenical
10-6-25