

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ACADEMIC AFFAIRS

Course Number: SCI 1XX Department: Engineering and Physics
Sciences Department

Course Title: Science of Super Heroes Semester: Spring Year: 2023

Course Objective	Competencies
1. Introduction to Pop Culture, Super Heroes, Star Wars and Harry Potter characters. Identify the basics of science principles and physic concepts.	The students will be able to: 1. Classify the pop culture of interest and the main characters with the concept or equation in science and physics that it applies to through quizzes and problem solving.
2. Compare Space: Travel and planets, solar sails, hyperspace, meteorites, galaxy, space trash, wormholes with Pop Culture Heroes.	1. Examine and apply the basic concepts of the solar system and planets, and formulate if life can live on which planets. 2. Recognize and identify the basic concepts of science behind hyperspace, wormholes and space travel by analyzing problem based learning.
3. Explore Time Concepts as they are related to science principles: Time travel, flight, flying speed, platform 91/4,	1. Differentiate the basic concepts of velocity, speed, acceleration, time, speed of light as it relates to pop culture character's abilities. Calculate speed, acceleration in pop

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travel to Hogwarts, flying animals.	culture scenarios. 2. Investigate the possibility of traveling to Hogwarts, flying animals, and invisible places.
4. Identify Force concepts with Pop Culture: Jedi force, frozen blaster bolt, force jump, super heroes' forces, and force behind wands.	1. Identify the basic concepts of forces. 2. Describe how forces are used in super heroes, star wars and harry potter. 3. Investigate and calculate science concepts of force jumping, a blaster bolt and evaluate if they are feasible.
5. Relate the Science of Machines to Pop culture: droids, antigravity vehicles, laser weapons, AI, Thor's hammer, Iron man's suit,	1. Identify and examine the basic concepts of lasers. 2. Investigate how antigravity vehicles would work. 3. Understand Artificial Intelligence and how it relates to science. 4. Be able to DE myth Thor's hammer, Iron man's suit, Hogwarts wands, and droids through analyzing with science principles and equations.