Good Fiction Titles with STEM Elements

Above World by Jenn Reese Thirteen-year-old Aluna has lived her entire life under the ocean with the Coral Kampii in the City of Shifting Tides. But after centuries spent hidden from the Above World, her colony's survival is at risk. The Kampii's breathing necklaces are failing, but the elders are unwilling to venture above water to seek answers. (genetic engineering, technology, climate change)

Dark Life by Kat Falls The oceans rose, swallowing the lowlands. Earthquakes shattered the continents, toppling entire regions into the rising water. Now, humans live packed into stack cities. The only ones with any space of their own are those who live on the ocean floor: the Dark Life. (climate change, ocean rise, ocean issues, ocean technology, marine biology)

Diverse Energies (stories by Paolo Bacigalupa, Ursala K. Leguin and others) In a world gone wrong, heroes and villains are not always easy to distinguish. Here is a collection of stunning original and rediscovered stories of hope and tragedy that pit students, street kids, "good girls," kidnappers, and child laborers against their environments, their governments, and sometimes themselves as they seek answers in their dystopian worlds. Take a journey through time from a nuclear nightmare of the past to society's far future in the stars with these eleven stories by masters of speculative fiction. (nuclear war, climate change, environmental degradation, space travel)

Ender's Game by Orson Scott Card In order to develop a secure defense against a hostile alien race's next attack, government agencies breed child geniuses and train them as soldiers. (space travel, genetic engineering, extraterrestrial lifeforms, leadership)

Flush by Carl Hiaasen Noah's dad is sure that the owner of the *Coral Queen* casino boat is flushing raw sewage into the harbor—which has made taking a dip at the local beach like swimming in a toilet. He can't prove it though, and so he decides that sinking the boat will make an effective statement. (environmental ethics and activisim, pollution)

Hoot by Carl Hiaasen Everybody loves Mother Paula's pancakes. Everybody, that is, except the colony of cute but endangered owls that live on the building site of the new restaurant. Can the awkward new kid and his feral friend prank the pancake people out of town? Or is the owls' fate cemented in pancake batter? (environmental ethics and activism, endangered species)

Orleans by Sherri L. Smith After a string of devastating hurricanes and a severe outbreak of Delta Fever, the Gulf Coast has been quarantined. Years later, residents of the Outer States are under the assumption that life in the Delta is all but extinct...but in reality, a new primitive society has been born. (climate change, ocean rise, biology)

Parched by Melanie Crowder In this haunting, lyrical novel told from three perspectives, Sarel has just witnessed the violent murder of her parents. But she is not completely alone

on the drought-ridden land. Nandi is the leader of a pack of dogs who looks out for her pups and for skinny Sarel-girl. (climate change, water scarcity)

Scat by Carl Hiassen When their unpopular biology teacher goes missing in a suspicious fire during a field trip to the Black Vine Swamp, Nick and Marta don't buy the headmaster's excuse for her absence and decide to do some investigating of their own. Eco-avengers, an endangered panther, illegal pipelines in the Everglades, and an underachieving student with the nickname "Smoke" all play a part in this gripping novel. (oil pipelines, Everglades, endangered species)

Shipbreaker by Paolo Bacigulupa In America's Gulf Coast region, grounded oil tankers are being broken down for parts by crews of young people. Nailer, a teenage boy, works the light crew, scavenging for copper wiring just to make quota and hopefully live to see another day. (recycling, technology, bio-engineering and genetics)

Stung by Bethany Wiggins When the honeybee population collapsed, a worldwide pandemic occurred and the government tried to bio-engineer a cure. Only the solution was deadlier than the original problem. (biology, genetics)

Tesla's Attic by Neal Shusterman and Eric Elfman After their home burns down, fourteen-year-old Nick, his younger brother, and their father move into a ramshackle Victorian house they've inherited. Ultimately Nick learns that the genius Nikola Tesla placed his last inventions in the attic as part of a larger plan that he mathematically predicted. (technology, mathematics)

The Drowned Cities by Paolo Bacigalupa In a dark future America where violence, terror, and grief touch everyone, young refugees Mahlia and Mouse have managed to leave behind the war-torn lands of the Drowned Cities by escaping into the jungle outskirts. (climate chance, ocean rise, genetics)

The Neptune Project by Polly Holyoke In a dystopian future where climate change is out of control, scientists genetically alter their own children to live in the sea. Protected by a loyal pod of dolphins, a group of teens must learn how to survive in the dangerous and beautiful world beneath the waves. (climate change, ocean rise, marine biology, genetics)

The House of the Scorpion by Nancy Farmer This novel may be futuristic, but it hits close to home, raising questions about what it means to be human, what is the value of life, and what are the responsibilities of a society. The protagonist at the novel's center is young Matt, an unknowing clone created to perpetuate the life of El Patron, a powerful drug lord in a small village in Mexico. Prinz Honor, Newbery Honor, National Book Award (genetics, ethics, cloning)

The Thing About Jellyfish by Ali Benjamin This moving and beautifully written coming of age story deftly weaves in science with the struggles of a young girl trying to come to terms of the death of her former best friend. National Book Award Finalist (marine biology, mathematics, astronomy, biology, extinction, the scientific method)

Young Adult Titles

Alas Babylon by Pat Frank When a nuclear holocaust ravages the United States, a thousand years of civilization are stripped away overnight, and tens of millions of people are killed instantly. But for one small town in Florida, miraculously spared, the struggle is just beginning as men and women of all backgrounds join together to confront the darkness. (nuclear warfare, technology, survival)

Origin by Jessica Khoury Pia has grown up in a secret laboratory hidden deep in the Amazon rain forest. She was raised by a team of scientists who have created her to be the start of a new immortal race. But on the night of her seventeenth birthday, Pia discovers a hole in the electric fence that surrounds her sterile home--and sneaks outside the compound for the first time in her life. (genetics, genetic engineering, indigenous peoples, rainforest, science experiments)

The Martian by Andy Weir An astronaut is left behind on Mars and faces certain death. The story is told mostly through the log entries of astronaut Mark Watney, chronicling his efforts to survive: to make the prefab habitat livable, find a way to grow food, create water, and get himself off the planet. (Mars, space travel, botany, survival, technology)

The Islands at the End of the World by Austin Aslan In this fast-paced survival story set in Hawaii, electronics fail worldwide, the islands become completely isolated, and a strange starscape fills the sky. Leilani and her father embark on a nightmare odyssey from Oahu to their home on the Big Island. Leilani's epilepsy holds a clue to the disaster, if only they can survive as the islands revert to earlier ways. (biology, epilepsy, extraterrestrial beings)

Tankborn by Karen Sandler Best friends Kayla and Mishalla know they will be separated for their Assignments. They are GENs, Genetically Engineered Non-humans, and in their strict caste system, GENs are at the bottom rung of society. GENs are gestated in a tank and sent to work as slaves as soon as they reach age fifteen. (genetics, bioengineering, ethics)

Unwind by Neil Shusterman Life is inviolable from the moment of conception until age thirteen. Between the ages of thirteen and eighteen, however, parents can have their child "unwound," whereby all of the child's organs are transplanted into different donors, so life doesn't technically end. Connor is too difficult for his parents to control. Risa, a ward of the state, is not talented enough to be kept alive. And Lev is a tithe, a child conceived and raised to be unwound. Together, they may have a chance to escape and to survive. (genetics, cloning, ethics)