Everyone has a hunger for science fiction—astronauts, elementary school children and university students, girls and boys, women and men—people of every age, background, and occupation throughout the world.

But what is SF? Galaxy-spanning space opera? Alternate history? Elegantly reasoned philosophical fictions through which humans, or human stand-ins, such as aliens, explore the myriad possibilities that scientific thinking and technological creativity have wrought?

Science fiction is all of these and more.

Definitions of science fiction pop up like mushrooms after a rain. I prefer Isaac Asimov’s: “Science fiction can be defined as that branch of literature which deals with the reaction of human beings to changes in science and technology.” And I will add that SF is a literature that addresses the questions Gauguin set forth as the title of his famous painting, Where Do We Come From? What Are We? Where Are We Going?

I have been engaging students with science fictional thinking at Georgia Tech since 2010, when I was invited by Lisa Yaszek, Director of Undergraduate Studies in the School of Literature, Media, and Communication, a distinguished SF scholar and the driving force behind LMC’s science fiction program, to teach.

The hunger for SF is especially strong in the students I instruct at Georgia Tech. Perhaps it is because they are, in no small measure, learning, creating, and living SF in the Aerospace Systems Design Lab, a renowned robotics lab, through weekly nanotech research talks, and by investigating the history of science and technology—not in isolation, but seen as arising from and concurrently driving culture. It is no wonder that they seek to learn how to read and analyze science fiction, to write science fiction, and to see the history of science and technology through a science fictional lens.

One would think that reading science fiction would be the easiest thing in the world for these students, but this is not necessarily so. Students are challenged by William Gibson’s Neuromancer on encountering multiple neologisms—“ice,” “simstim,” or, even, “cyberspace,” as first revealed by Gibson scrying, through the blur of rapid technological change, an entirely new world. Had they picked up this book in a store, they may have been as daunted as if faced with a page of Chaucer. Instead, learning to think through what “matrix” or “flip” might mean, given the context, opened to them one of the delights of written science fiction—learning a new language. In Joanna Russ’s The Female Man, they encounter postmodern construction, biting social commentary, and a rainbow of feminist theory transformed into colliding worlds. Octavia Butler’s Dawn poses ethical dilemmas about power that open discussions about postcolonialism. And innumerable short stories, each a pocket universe, immerse students in thinking about ecology (Frank Herbert’s “Seed Stock”), the hilarious possibilities of theoretical physics as an explanation for our frequent space-time confusion (Connie Willis’s “At the Rialto”), and a terroristic humanity-ending virus distributed by a biologist who wants to save Earth, envisioned by him as a woman, from further ravaging (James Tiptree, Jr.’s “The Last Flight of Dr. Ain”). To read science fiction of any age is to connect to the technological and social continuum in which it was written in specific, revealing detail, as my students did in the class “From the Earth to the Moon: The Sixties” when they read “There Will Come Soft Rains.” Ray Bradbury’s story
shows, with stunning compactness and impact, the aftermath of the nuclear attack that everyone in the mid-fifties feared, and helped students understand the politics of the era.

There are depths in SF literature that are not always apparent in the media’s depiction of high-tech weapons, space heroines, and dystopian futures. Reading SF often requires a process of thoughtful analysis to get to the frisson of realization.

Writing science fiction is a fish of a different color. In my Creative Writing class, students may submit stories of any style, mode, or genre. However, when they write SF, the bar is high. Setting a story in a ready-made, media-spawned dystopian future may give a budding writer practice in writing dialogue, but the main task of the science fiction writer is to take advantage of the sheer creative breadth opened by thinking science fictionally, to be wholly original, to move the reader to an entirely new place. Giving a unique, imagined reality the depth of good fabulous literature requires research, the hard work of hammering out a first draft, and then creating, through the process of as many rewrites as it takes, a seamless work written in one’s own voice.

I encourage students to submit their stories to the Dell Magazines Award for Undergraduate Excellence in Writing Science Fiction and Fantasy contest, administered by the editor of this magazine, Sheila Williams, and by Rick Wilber, SF author and Professor of Mass Communications and Creative Writing at the University of South Florida. One of my students was an honorable mention in the Dell Award contest, and another won a $1,000 prize in The Future Powered by Fiction contest.

So—what do we teach when we teach science fiction literature and writing?

We teach not just one new language, but as many as contained in the fiction we read.

We give students tools with which to speculate how our real or imagined technologies might change us. We give them infinite time, and infinite possibilities.

And we give them three vital questions with which to play: Where do we come from? What are we? Where are we going?

Then we look forward to their myriad replies.