we can solve through rational analysis.

The world is experienced as a set of logical puzzles that the merits of reasoning through evidence. The essentially thinking beings, basing our decisions on evidence.

The logical paradigm postulates that we are "hard wired" to respond to narratives with:

- More story-consistent beliefs & attitude change.
- More self referencing; and
- More meaningful communication is a form of storytelling--we experience the world as a series of narratives characterized by conflict, characters, beginnings, middles, and ends.

The narrative paradigm postulates that all meaningful communication is a form of storytelling--we experience the world as a series of narratives characterized by conflict, characters, beginnings, middles, and ends.

The master narrative is widely known by members of a culture, often based in history, applies to a broad spectrum of the population.

The strategic narrative is the story that will be told when some difficult objective is achieved. It draws from the master narrative, is anchored in history, contains actions in the present to realize the objective.

The personal narrative is central to who we are and who we aspire to be. It is often aligned with the opportunities and threats of the strategic narrative as a motivation to play a part in the ultimate achievements of the strategic objectives.

A STEM Master Narrative

"STEM Education Is the Key to the U.S.'s Economic Future"  
"STEM disciplines are the cornerstones of the jobs that will keep America competitive."  
"STEM and STEM education are vital to our future—the future of our country, the future of our region."

The course is first offered three years ago. Last year's total enrollment exceeded 450. Centering CHGN 125 around the STEM strategic narrative is intended to provide context and motivation for our student's academic experience by exposing them to the fact that they are now part of a science and engineering community sharing a common history and set of long term objectives--the ongoing human desire to master design at all scales.

The science of design begins with a process in which energy is stored in a structure. This energy is always stored (regardless of the process) through changes to atomic motions or positions--creating a new structure. Properties are determined by the structure. There are an infinite number of processes that will satisfy these properties; a structure that possesses these properties; and a process to assemble this structure. There are an infinite number of processes that will satisfy the performance criteria. Selecting from among these is the art of design.

History shows that the applied sciences enable design through the discovery of process-structure-property-performance relationships. Engineering progress has been achieved by resolving these relationships at an ever finer scale. Future advances will be dependent on understanding these relationships at the most fundamental of engineering scales, i.e., at the atomic scale.

The objective of our STEM strategic narrative is to discover and apply processes to manipulate at the atomic scale, producing structures with desired properties (Handout: Molecular Engineering Overview).

The science behind these relationships, how they are discovered and used.

We are "hard wired" to respond to narratives with:

- More cognitive response;
- More self referencing; and
- More story-consistent beliefs & attitude change.

All traits associated with learning!