ES.729 ASSIGNMENTS LISTING, FALL 2015

**bold** indicates extensive revision

**WRITING** (Students must complete 5000 words of revised writing to receive credit in this subject)
Design based writing assignments; these use the engineering proposal/report trajectory to teach essay structure and the writing process—because the writing naturally develops in parallel with the development of the designed product.
- **heat transfer white paper** (500 “student” words—structure is based on extensive scaffolding)
- **design proposal I** (1250 “student” words—includes additional scaffolding and revision of elements taken directly from the white paper)
- **design report I** (1750 “student” words— which include significantly revised elements of the proposal)
- **design proposal II** (1000 words)
- **project II report script** (500 words)

“Reading” analyses
- 2 movie response essays (750 words—“surface” reading regarding team-work & **1000 words—deeper reading based on non-verbal communication**)
- product reviews—“reading” artifacts (5x250 word drafts & **1x1250 word final draft**)

Experiential essays; explaining what it is to engineer and be an engineer
- 2 *What Color is My Parachute* 1 page narrative essays (2 x250 words)
- **myth** (750 word)

Informal writing
- journal

**PRESENTATIONS**
- class participation
- informal presentations
- oral design report on the efficacy of design I

**MEDIA**
- web presence (proposal & possible site draft)
- project II report video

**“LECTURE” TOPICS & IN-CLASS ACTIVITIES**
- brainstorming
- design—text and products
- writing: the big picture, process and product
- writing: *The Science of Scientific Writing* & beyond
- graphics: principles and examples
- academic integrity
- grouping logic (reductionist thinking)
- reading & textual analysis
- team formation trajectories
- poster design
- idea pitching
- oral presentations
- proposal & report structure
- story telling
- poetry
- quo vadis
- and many smaller details
READING/"TEXTS"
Each of these readings deserves comment in the journal:
- PREP article (which motivates writing workshops)
- Kishlansky on reading
- ASME ethics and author’s guidelines
- the existential pleasures of engineering (excerpts)
- the science of scientific writing
- industry communications requirements
- who’s a nerd
- boston globe on nerds
- should ohm’s law be repealed?
- assorted Petrosky
- assorted myths
- what color is my parachute (excerpts)
- in a station of the metro
- the onion
- Stagecoach
- Essays on Stagecoach
- Pogue, camera review
- case study, the OXO goodgrips

MEETINGS
- expect monthly individual meetings with the instructor