

ES.729 ASSIGNMENTS LISTING, FALL 2018

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- *should ohm's law be repealed?*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