

21W.732 PROCESSES SUMMARY

WRITING, GRAPHICS, AND ORAL PRESENTATIONS	READING	MEETINGS	PREP	FRDPARRC/DETERMINISTIC DESIGN
<p>Sources: Dave's ranting</p> <p>Overview:</p> <ul style="list-style-type: none"> ○ The production of successful communication requires a process that is iterative, recursive, non-linear, and fractal. ○ The challenge is 2-fold: author/reader mismatch and convention juggling. ○ Successful communication requires both time and a time/effort integral. ○ The process deserves PREP or other forms of collaboration. <p>Details:</p> <p>The process elements that must be iterated in a non-linear, fractal manner:</p> <ul style="list-style-type: none"> ○ Procrastinate ○ Brainstorm ○ Organize ○ Research ○ Start writing ○ Edit ○ Finish 	<p>Source: Kishlansky & Dave's ranting</p> <p>Overview:</p> <ul style="list-style-type: none"> ○ Reading is a process that is iterative, recursive, non-linear, and fractal. ○ The reading process connects texts, ideas, society, authors, readers, and the physical world. The connections are notoriously nonlinear, fractal, and tangled. ○ For the purposes of 21W.732, the reading focuses on the situation of engineers in the grand scheme of things and the acquisition of information required for the design process. ○ Successful reading requires both time and a time/effort integral. <p>Details:</p> <p>To claim you have read a document implies that you have answered these 9 questions:</p> <p>Level I questions:</p> <ul style="list-style-type: none"> ○ Who wrote the document? ○ Who was the intended audience? ○ What is the content? <p>Level II questions:</p> <ul style="list-style-type: none"> ○ Why was the document written? ○ What type of document is this? ○ What are the assumptions of the document? <p>Level III questions:</p> <ul style="list-style-type: none"> ○ Can I believe this document? ○ What can I learn about society from this document? ○ What does this document mean to me? 	<p>Source: Dave's ranting</p> <p>Overview:</p> <ul style="list-style-type: none"> ○ For time scales >> than meeting duration, meetings are discrete events in time; thus, at a large scale, the meeting process is linear: <ol style="list-style-type: none"> 1. Agenda 2. Preparation 3. Meeting 4. Minutes ○ Successful meetings require both time and time/effort integral. <p>Details:</p> <p>Hints for each process step:</p> <p>Agenda: Each item deserves a time estimate, and categorization along the lines of information, discussion, decision, and action.</p> <p>Preparation: Do what you need to do to ensure the success of the meeting.</p> <p>Meeting: three stool legs: attend, participate, and permit/coerce others to participate.</p> <p>Minutes: Document accomplishments, decisions, and action items.</p>	<p>Source: Marc's journal article</p> <p>Overview:</p> <ul style="list-style-type: none"> ○ Collaboration is a synergistic combination of individual contributions. ○ Collaboration is a process that is iterative, recursive, non-linear, and fractal. ○ Successful collaboration requires both time and a time/effort integral. <p>Details:</p> <p>Process steps for collaboration:</p> <ul style="list-style-type: none"> ○ Individual contribution of thought and/or action ○ Individual recognition of other team members' contributions ○ Individual response to team members' contributions ○ Synthesis of team outcomes from the individual contributions. 	<p>Source: http://web.mit.edu/sp.784/www/DOCUMENTS/Process%20of%20Design%20(Slocum,%20MIT).pdf</p> <p>Overview:</p> <ul style="list-style-type: none"> ○ Design is a process that is iterative, recursive, non-linear, and fractal. ○ The process is an organization of analysis that leads to design decisions. <p>Details:</p> <p>Design steps:</p> <ul style="list-style-type: none"> ○ Functional Requirements ○ Design Parameters ○ Analysis ○ Research ○ Risks ○ Countermeasures <p>Design Decision (Pugh chart):</p> <ul style="list-style-type: none"> ○ Compare concepts ○ Compare against vanilla concept ○ Weighting scheme depends on team and mission statement.

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