Framework:
Functional-power w/mng.; Strong Matrix-PM; Weak-funct. Mngr; balanced-shared; Proj. Exped-staff assist. & commun coord; Proj. Coord.-some authority

4. Integration
Lesssons Lrnd-technical, PM & mgnmt aspects
Corrective Action-i/p to PP exec.; o/p frm int. CC & all control process

5. Scope:
Prod. Selec Mthds-Benefit Measurements &constrained optimization methods
Delphi-scope of work; estimates or risk
Decomposition[what]-work pkgs; activities; WBS[tool]
Scope Verif-accept of scope of wrk; Quality Control: correctness of wrk
Delv. Descrip-nouns; Act. Descrip-verbs
Project Phase Reviews-phase & stage exists; kill pts; off-ramps
Configuration Mngmt-Peter Drucker; doc. Physical charac. & funct of product of project; proc. to apply tech & admin direc & surveillance
WBS –provides basis for developing scope definition, cost control system & detailed schedule

6. Time:
N/W Diagrams-after Proj. Charter, Proj. Staffing & WBS
Gantt-compl after WBS & N/W diagrams
CPM-most likely; AOA only; emph. costs w/ sched flex.
PERT-3 x est., AOA, emph sched. w/costs flex. (time & cost)
PDM-AON, 4 relationships, 1 x est., most common
ADM-AOA, Activ On Line; uses more than 1 x est., F to S only
Before Finaliz Sched-**Dur Comp** (resource leveling, Fast Tracking [parel. incr. Risk], Crashing [resourc. incr. Cost], re-estimating [cont. most risk unknowns]
Flowcharts-Time & Quality (depict process thru system)
Mand[hrd logic];discr[pref/soft logic;external[needs o/s proj]
Estimating Methods: CPM, PERT [super to CPM], Monte Carlo (range of values simul. based on PERT-Time/Risk/Cost)

7. Cost: **Baseline Cost – S curve**
EVM-integrate scope, schedl & resources to measure report project performance
Parametric Modeling/Estimates–math analysis (cost/time) $/module; sim to analgous; uses historical info; Learning Curve & Regression Analysis (Scatter diagrams)
Monte Carlo-Time/Risk/Cost-prob. of compl project; based on **PERT-** range of values
Decision Tree-Cost & Risk
Delphi Technique-expert interviewing- scope of work; estimates or risk
Pareto-Quality&Cost (graph frequ of occur & types of probl.; rank ordering; 80/20; puts info in order of priority-rank order
Analogous est.–top down; expert judgment; & **Bottom-up**
PV–Value today of future cash flows
NPV–PV of total benefit less cost – choose higher
IRR–inflows & outflows – choose highest
Payback–choose shortest period
BCR–compares benefit of cost when benefits same as revenue–choose higher BCR

- BCR > 1 benefit greatner than cost
- BCR < 1 costs greater than benefits
- BCR = 1 costs and benefits same

Opportunity Cost–value of project NOT selected
Law of Diminishing Returns- more put in/less get out
Working Capital-current assets min current liabilities (invest)
Straight Line Depreciation-same about taken off ea. year
Accelerated Depreciation-Declining & Sum of Yr Digits (faster than SLD)
Value Analysis (value engineering)–least costly way of doing same work w/o loss of performance
Return on Investment-Project Costs as compared to increased revenue that will accrue over life of project deliverable. (A [increased revenue] – B [total project costs]) / B x 100 = C [ROI]
Order of Magnit–25%to+75%; **Bud Est**. –10%to+25%; **Definitive Est.** –5%to+10%
Types of Costs-Variable-materials,wages;Fixed-setup,rental;Direct-wages, cost of materials; Indirect-overhead

8. Quality: Conformance to req. & fitness for use
Prevention over Inspection
Project Quality System-org. struct, resp, proced, processes & resources needed to implement Quality Mngmt
Metric-aka operational definitions-describes what is being measured & how it will be measured according to Qual Control Plan & Proc
Marginal Analysis-Optim. Qual where increm rev. = increm cost
Trend Analysis-math techniques-uses historic. results to predict outcomes
Histograms-displays frequ. Events occur; shows proc. varia
Crosby – Zero Defects, do it right the first time
Deming-80% of cost of quality is mng. problem (common causes of variances), PDCA w/Shewhart;
Feigenbaum-wrote Total Quality Control
Ishikawa-root cause; explore past outcomes, cause & effect
Juran-Fitness for Use–qual improv, planning & control
Kaizen-Continuous improvement; focuses on prod.
Kanban-JIT manufacturing-no stock
Shewhart – developed Statis. Prcss Control PlanDoCheckAct
Taguchi- origin Design of Experiments Quality Loss Function
Pareto Diagrams-rank ordering 80/20-**see Cost**
Scatter Diagrams-plot independent (i/p)& dependent (o/p) variables – relationship between 2 elements
Attribute Sampling–conforms or not
Variable Sampling-measures degree of conformity
Special causes – unusual risks; Random causes-normal varia
Statistical Sampling-sample
Q. Planning-benchmarking; benefit/cost anal; flowchart; design of experim. [what if-optimal combin of variables]; **cost of quality** [conformance-non conformance]-prevention, appraisal,failure costs); fishbone (cause & effect)
Q. Assurance-qual audits; PMs have greatest amount of infl.
Q. Control-monitoring work results **variable**(does or does not conform-size,shape,weight);**attribute**(degree of conform. -inches,lbs.)
Q. Control Tools-inspection, pareto, fishbone, checklists, statis sampling, control charts (graphic display of results over time), flowcharting (depict process thru system), trend analysis
Mutually Exclusive-can't both occur at once
Statistical Independence-prob.1 event occur doesn't affect other
Normal Distrib.-most common prob. density distrib. chart; bell curve; measures variances

9. HR:
Team Building-forming, storming, norming, perform
Sources of Power–Expert/reward best; penalty worst; formal/reward/penalty come w/PM; expert earned
Mngmt Skills-ldership, commun, negot, influence, probl solv

Mngmt Styles – Page 5 Jean's notes
Conflict Resolution Types-confronting (problem solving) best; compromising 2nd best; withdrawal (avoidance); smoothing; forcing
Categories of Conflict–Schedules, Project Priorities, Resources (highest during planning), technical opinions, admin. Proc., cost, personality
Achievement Theory-motived for achiev. Power & affil.
Expectancy Theory–efforts will lead to effective performance & expect rewards
Contingency Theory-Fiedler-Theory Y & Hygiene-people motiv. to achieve levels of competency & will contin
Herzberg's Theory–deals with **hygiene** factors (poor hygiene may destroy motivation but improving them will not improve motivation); & **motivating** agents (work itself motivates people – resp., self actual., prof. growth, recog.)
Hertzberg Blanchard-(Sit Ldrshp)-X axis task H to L maturity; Y axis relationship
Maslow's Hierarch of Needs–people do not work for security & $; work to contr. & to use their skills-'self actualization" (physiological, safety, social, esteem, self actu.)
McGregor's Theory X–people need to be watched, incapable, avoid respons. & work; believe people motivated by punishment, **$** & position
McGregor's Theory Z–people willing to work w/o supervision & want to achieve
Theory Z–workers need to be involved in participative management

10. Communications:
Transmitter, Receiver, Encoder, Decoder, Message, Medium (Sender, Msg., Receiver)
Nonverbal 55% (physical mannerism); **Paralingual**–pitch & tone of voice; **Active Listening**–confirms listening, confirms agreement & asks for clarification; **Effective Listening**-watch speaker, think before speaking; ask questions, repeat, provide feedback; **Feedback**–Do you understand?
Construc.Roles-initiators,info seekers, info givers, encourages, clarifiers, harmonizers, summarizers, gate keepers; **Destrict**-agtgressor,blocker,withdrawer,recognition seeker, topic jumper, dominator, devil's advocate
Performance Report incl. Trend-exam proj. results over time to see if improving or deteriorating; Forecasting-predict future status/performance; Variance-compare actual to planned

11. Risk-discrete occurrence-may affect proj.good/bad
Uncertainty-An uncommon state of nature, charac. by the absence of any info related to desired outcome
Risk Probability-likelyhood that a risk will occur
Risk Mngmt-process involved w/ident,analyzing,resp. to risk. Max. results to posit. events & min. consequ. of advers events
Risk Categories-Tech,quality,perform; PM; Organiz, External External-regulat, environ, govern, market shifts, currency, taxa Internal-time, cost, unforeseen cond., scope chngs, inexpert, poor planning, people, staffing, materials, equip Technical-change in technology; Unforeseeable-only small portion 10%
Probability Distrib-display risk info
Risk Triggers-Symptoms-early warning signs
Risk Ident-Delphi, brainstorming, interview, strengths, etc.
Qualitat. RA-Subjective-probabil/impact; assumpt testing; data precision ranking (how good is data?); Risk Mngmt Matrix
Quantit. RA-numerical-Exp Mont Value(prob/consequ); Decision Tree(future events-expected value-prob x impact-Cost too); Monte Carlo(range of values-Time/Risk/Cost-simulation using PERT); Sensitivity Analysis (determ. what risks have most impact-places impact on the proj. plan of change single pt. variable); Interviewing; uses continuous Prob. Distrib.
Risk Planning-assigns risk owners
Risk response strategies-avoidance; mitigation; acceptance, transference (deflection/allocation)
Risk Monit & Control-Conting plans; risk response audits; risk reviews; o/p workarounds

12. Procurement:
CR (most risk to buyer; total require. unknown); T&M (small $ & short term, buyer med risk); FP (seller has risk & concerned w/scope); PO (signed by 1 party)
Incentive-helps bring seller's obj. in line w/buyer
Scope of Work: Performance (what prod should accompl-RFP/CR); Functional/Detailed (end purp-RFQ T&M); Design (what is to be done-IFB[requ 1 price]/FP)
Default/Breach-any oblig of contract not met; Material Breach-so lrg may not be poss. to compl. wrk under contract; Privity-contractual relationship
SOR/SOO-presented as problem to solve
Target Costs(Est.costs)-cost that contract will most likely obtain
Target Fee(Expected profit)-profit value that is negotiated & set forth in contract
Profit Ceiling & Project Floor-max/min values of profit
Price Ceiling(Target Price)-mas the buyer will pay
Max & Min Fees-% of the target costs & establish the o/s limits of contractor's profit
Sharing Arrangement Formula-give cost resp. of the cust. To the cost resp. of the contractor for ea $ spent (Buyer/Seller)
Fait Compli-one party tries to convince other party disc. term is no longer an issue
Contract Closeout-success perform; mutual agree & breach contract (termination)

Closing-Formalize proj comp & dissim. info to proj partic: Addition-into oper.; Starvation-resc. Cut off, budg reduced; Integration-resc. Distrib to other areas; Extinction-proj. compl. Risk lowest; prob. of completion highest; stakeholders lest amount of influence; PMs greatest amount of influ., $ lower; weak matrix least amount of stress

Prof. Resp.: Cultural diff-language, cultural values, nonverbal actions, cultural practices
Culture Shock-anxiety that results with all familiar cultural touchsontes are absentperson exposed to new culture
Ethnocentrism-eval foreing's behave by own standards
Sapir-Whof Hhpothesis-relationship betw'n langu & culture; lang. not merely mechanism for comm. but shaper of ideas
High/Low Context Comm-H.-most info is in physical context or internalizy by person; L.-most msg vested in explicit code trans part of msg.
Equality-Hierarchy Dimension-**Egalitarian Orient**-relative inform. Relations btwn people in high&low status; general disregard of protocol & high level of deleg. of authority; **Hierarchical Orient**-status & power hierarchies are maintained; **TenderTough Dimension**-**Tough** societies place a high value on doing, achieving external, measure goals & accompl objectives; **Tender**-emphasize affilia, character, person qual, nurturing, quality of life & maintenance of social relation; **Uncertainty-Avoidance Dimension**-referes to lake of tolerance for ambiguity & need for formal rules & HL org. struc.; **Time Dimension**-import of precise reckoning of time; degree to which culture uses sequen or synchro time; whether culture is past, present or future oriented