PROGRESS REPORTING FOR SENIOR DESIGN PROJECTS

Every true project has (at least) three constraints that must be managed. The "**Triple Constraint**" of the project management is to:

- perform the agreed **functions**,
- within the agreed **time**,
- at or below the agreed **budget**.

For the Industrial Engineering and Engineering Management (IEEM) students on senior design projects, the entire student team is responsible for managing the Triple Constraint. Successful management oftentimes means meeting all constraints, but because a true project involves uncertainty (and hence, risk), the project may be "successfully" managed without always meeting all constraints. To successfully manage a project (in either case) means that there is at least one inviolable law:

The project management must NEVER allow the senior management to be surprised!

Please note that the law does NOT include the wording "unpleasantly surprised". Even pleasant news should not surprise a senior manager. For this reason, and for the purposes of pedagogy, each team will collectively be responsible for periodic progress reports. For the IEEM students, the frequency and deadlines of required progress reports is given by the course instructor on the Schedule Page of the course website. The frequency and deadlines may be modified by the instructor according to the needs of the project, but the format of the required progress reports will be the same:

The Progress Reports will be in an e-mailed, memo format (**DO NOT submit them as an attachment**). The e-mail should be addressed to the instructor (and possibly to the project sponsors), and cc'd to the other student team members. Because of the number of different projects, students, and the number of courses concurrently being taught by an instructor, the subject line should read "***IENG 464-465 Progress Report for***" and should include your project title. For example:

From:	I.R Secretary@SDMInds.edu	Sent:	Tue 1/31/2012 12:12 PM
To:	Dr. Jensen; Ng, Golf, & DeVower, LLC		
Cc:	E.Ville@SDMInds.edu, A@SDMInds.edu, B@SDMInds.edu, C@SDMInds.edu, D@SDMInds.edu		
Subject:	**IENG 464-465 Progress Report for Cash N Doom Project**		

The body of the progress reports will include each of the following four sections. Sub-items may be put in bullet form. The idea is to communicate concisely, but sufficiently complete to prompt efficient face-to-face progress report meetings.

Current Period Task Progress – Items in this section should be in bullet form, with the assigned personnel listed, and the percentage of the task completed stated in parenthesis. For example:

- Build Death Ray: Dr. E. Ville (14 days duration, due 2 days ago, 95% complete)
- Steal Rocket: Graduate Assistants A & B (7 days duration, due 2 days ago, 100% complete)
- Mount Death Ray on Rocket: Minions C & D (4 days duration, due in 2 days, 25% complete)

Current Period Project Decisions – Items in this section follow a similar format, but identify how the project progress is evolving in light of uncertainty. For example:

- Decided (consensus, not unanimous) NOT to bail out the captured Graduate Assistant B so as not to exceed project budget.
- Decided (unanimously) to purchase metric fasteners (so as to mate the U.S. built Death Ray successfully to the E.U. "supplied" rocket).

Next Period Tasks and Assignments – Items in this section would not include current period tasks unless they were reassigned, substantially revised, or if they were eliminated. This section would include tasks that are planned to begin during the coming period and new tasks that have had to be added. For example:

- Enlarge Death Ray Mounting Holes to Accommodate Metric Fasteners (New Task): Graduate Assistant A (1/2 day duration, due today) – *Memo to self: Next time, specify stealing a NASA rocket!*
- Complete Death Ray Construction (Program Targets): Dr. E. Ville (1/2 day left, due today)
- Complete Death Ray Mounting: Minions C & D (2 days left, due in 2 days)
- Launch Rocket with Death Ray: Entire Team (1/2 day duration, due in 3 days)
- Purchase Letterhead Stationary, Spell Check and Mail Extortion Letters: I. R. Secretary (2 days duration , due in 7 days)

Current Budget Status – Summarize the financial situation of the project. Do NOT expect the instructor or sponsor to lookup figures from prior reports or do the math for your team, and neither should your team provide unnecessary detail. The formatted example (below) should be sufficient for most teams:

- Budgeted Amount: $ 42 000 000
- Expenditures to Date: $ 41 950 000
- Budget Remaining: $ 50 000
- Planned Expenditures (this period): $ 42 015
- Planned Expenditures Remaining: $ 8 000
- Variance: ($ 15)   Note – Postage rate increase

Please be brief and have your report submitted by the established due date. Additional details can be requested and supplied, and clarifying questions can be answered more efficiently during the follow-up, face-to-face progress report meetings.