ADDITIONAL TIPS FOR PROJECT WRITING

Projects are like horses: One can tell a good one only when one sees it.

Some additional rules/recommendations are:

1) *The project consists of an executive summary, an eight-ten pages extended summary and the project itself.*
2) *Read projects from last year. That will give you a good idea on what is ahead for you. However, do not trust that everything in there is OK or good. These projects did not receive full 100% approval.*
3) *Projects cannot be "evaluation-type" projects. Everything needs to be designed. -No Project will be approved by just browsing and copying material from INTERNET. Internet is not the ultimate source of data and is certainly the less credible one.*
4) *Avoid using Dramatic terms. (great huge, tremendous, etc)*
5) *Make sure you refer to the appropriate section were detailed calculations are shown. Do not write that something "was calculated" and do not show the calculations or do not say how it was done, using what formula, and what data. Never say things like " see excel file for a complete study" . You need to put some explaining text.*
6) *Get your chemistry or process basics straight and make sure nothing is left "to figure out later",*
7) *People expect success stories. Selling a failure is tougher, but is allowed. However, there is always a success-story angle to most projects.*
8) *References should be well organized, scanned and easily identifiable. They have to be available to the instructor at all times throughout the semester.*
9) *Be careful what you reference. Do not make a reference for the Stokes Law or the Bernoulli equation.*
10) *You cannot put an internet page as reference. They are too volatile. Ask for permission to copy the page into a file.*
11) *Treat information you get from internet with caution. Not everything is reliable. Remember that anybody can post anything. Make sure that things you quote have been somehow peer reviewed.*
12) *You cannot quote other designs without permission. If you find something done and calculated in the internet, you should use it if it is useful, but you need to repeat the calculations and make sure is correct. In certain special cases, I will allow quoting, but you have to ask specific permission.*
13) *Be prepared to be tested in the presentation and also individually after it on all parts of the project, not only the ones you worked on. You need not study everything in all gory detail, but you need to know the general aspects.*
14) *Rules on equipment sizing: 1) You need to have a specific section where the sizing is shown in detail, b) A PFD should be included where the information is summarized, c) Batch plants should have GANTT diagrams of the processing schedule.*
15) *Rules on economic analysis: a)Use your judgment with P&T tables for investment costs and operating costs. For example, if your plant does not need much instrumentation and control, choose the lower end of the estimates they offer. b)Always explain your choice. C) Do not use the percentages indicated there if you can do better. A typical example is utility. You can always estimate the cost of utility. Same thing with labor, royalties, etc.*
16) *Supporting files: The project needs to include a list of them, in a form of a table explaining contents.*
17) *Spreadsheets should be idiot proof, not something only you can understand and follow.*
18) *Asking experts in companies for help is allowed and encouraged. Now, once you get their opinion, do not assume it as fact. Study the merits of their recommendations and back their conculsions with calculations. Use faith somewhere else.*