Resolving Conflicts

In completing your project, you will be faced with numerous difficulties one of which could be resolving conflicts with a team member or your supervisor. The following discussion is designed to help you address the issue of conflict resolution in the event that it happens.

Conflict with a team member

At the beginning of September or preferably before the beginning of September, team members should decide on what each member will contribute to the project as a whole. In some cases one of the team members does not shoulder his or her responsibility or is domineering. These sorts of issues should be resolved amongst the team members quickly and not some time during the second term. The following procedure is recommended for dealing with this type of conflict:

1. Try to resolve the issue amongst yourselves first.
2. Failing this, approach your supervisor either as a group or individually and bring this to the attention to him or her.
3. Approach the administrator for your section if there appears to be no resolution to the conflict. The initiative should come from your supervisor and not from the group.

Note: Under no circumstances should you leave these sorts of issues to the last minute. We would hope that you can resolve your difficulties before the beginning of the winter term.

Conflict with a supervisor

As students, you are within your rights to demand office hours with your supervisor. We would recommend that you meet with your supervisor once a week or at least once every two weeks. It is in your interest to provide a short summary of what you have accomplished in the previous week(s) and where you hope to be in the weeks to come to your supervisor. This will help your supervisor guide you throughout the course. Generally a logbook is helpful for recording activities and a short summary can be extracted from your logbook notes. Make reference to your milestones and use the format for the progress reports as posted on the website. You will find it much easier to do your write-up if you follow this advice. In almost all circumstances we find that the supervisors provide good guidance. Unfortunately there are cases where this does not happen in which case we would recommend that you follow the following course of action.

Indicators of a problem:

1. Supervisor does not show up for scheduled meetings.
2. Supervisor does not respond to the student’s emails or does not make himself or herself available.
3. Supervisor has not read the rules and instructs you to do things that contravene the rules.
4. In the case of an industrially sponsored project, the supervisor delegates responsibility to the industry partner and does not recognize that the objectives of the course are in conflict with the objectives of the company.
5. The team relies on deliverables from a company where the lead times are very long and the chances that the deliverables are delayed are high. Deliverables can mean parts or certain services that the company or individual would offer.

The following procedure is recommended for resolving conflicts that fall into one of the five categories mentioned above:

1. Approach the supervisor and remind him/her of the course rules.
2. Recognize when a company directive contravene the course rules and bring this immediately to the attention of your supervisor.
3. Recognize when stated deliverables by a company could jeopardize your goals towards completing your project and make the supervisor aware of the situation.
4. If the supervisor does not respond adequately to items 1-3 then bring the problem immediately to the attention of your course administrator.

Note: It is imperative that you resolve these conflicts as soon as possible. Do not leave a resolution to a problem unsolved beyond the beginning of the winter term.

Conflict between goals of industry representative and course deliverables (if applicable)

There are a few important issues that students should be aware of when they work on an industry project. The supervisor should understand his or her responsibilities when it comes to guiding the students on an industrial sponsored project. The following guidelines can assist the student in the event that they encounter a problem with an industrially sponsored project.

Industry implants business principles into its technical fields for profitability. In this way it differs from a University which tends to be more research-oriented. Industry has a much narrower set of expectations imposed on all project deliverables. These deliverables are completed by students with no pre-existing context for these expectations. The design course administrators have developed a format for all project deliverables, which reflect the need for fair and efficient marking and not maximum profitability. Some groups may find themselves constantly in the conflict of following company guidelines to complete work and then attempting to repackage it for submission to the course, with the result that they may be penalized unnecessarily for failing to meet the marking standards. Students should fully comprehend the expectations of the design course during the project proposal phase even if this means also approaching one of the course administrators. The company must adopt project milestones which are agreed to by both parties. This will better serve the interest of the student.
This advice applies also to the project time frame and deadlines, which are specified by the course. Even though the company is aware of them, they will have their own schedule which they are more likely to follow. While it is true that all projects, industry or other, require good planning if deadlines are to be met, it is especially important for these types of projects because company resources and interests are complicating factors. For example, one phase of your project might require the manufacturing of a specific mechanical part, for which the company wanted to use its own machine shop. This decision would be fiscally responsible for them because of lower overhead costs, but it would be entirely impractical for you because there was a six-month backup in the shop. You would be forced into this new schedule and would never meet another deadline for this objective, presumably at significant penalty during evaluation. In fact, you may find yourself waiting for some part to be fabricated which would then cause you to be idle for almost the entire reporting period, thereby straining the content of that report. The lesson here is again that extra attention and communication is needed during the proposal phase of the project to make sure that all proposed work is feasible.

An illustration of the potentially disastrous effect of neglecting the above two issues is given by way of an anecdote from a project experience. Even though design projects are supposed to be yours (the students), when in fact they are industry-motivated, they are also theirs (the company). This is the exact oversight that could be forced on your group by the company project manager.

Example: The project manager first briefed the students, with the help of a small library of past reports, on the current project status, and second told them in no uncertain terms that they were responsible for choosing the immediate project direction, meaning the areas of weakness and some appropriate solution strategies. The technical proposal was written and the company project manager apparently was not able to understand the content of the proposal even though the marks received were respectable. Later when the first interim report was submitted, the company informed the group that they should explore alternative strategies because apparently what they had prepared was simply not feasible. Although this group tried very hard to demonstrate initiative and independent work, the two incidents would suggest to the contrary that much more control over their work was needed and expected by the company. However, because the project manager chose the exact course of actions, the company and the student suffered; the former through a lesser overall quality of the work, the latter by the mediocre grades that the work warranted.

The one subject which has been ignored up to this point is the role of the faculty supervisor. Most groups likely fall into the trap of marginalizing the supervisor into a purely technical capacity. On the contrary, the student has far greater need for guidance in the notion of design as an abstract process, because realistically this concept is still foreign to most fourth year students. The one mistake to not make is to let the supervisor transfer power onto a company representative, because although this person may be more qualified in the technical aspects of the project, it is not likely that he or she can serve
adequately in the other role as leader. Therefore, both parties must serve in their separate roles in order for the student to be fully prepared to thrive simultaneously in both the course and the company environments. Only with this balance of leadership are the expectations on the student reasonable. The best way to address all the issues discussed is to insist that the supervisor provide you with guidance.