

# Project 1 Proposal

*Cole Fichter, Rahmat Saeedi, Jason Hwang*

We have chosen Project Scheduling, so the main question we aim to answer is how best to assign a varied workload to office employees of differing skill levels in such a way that the work is completed in the shortest time possible. Such a problem is applicable to many corporate scenarios in which diverse tasks need to be assigned to a group of employees in a prudent and efficient manner.

We expect that there will be a few unstated constraints. For example, it seems reasonable to assume that the company would not want employees to be idle for long periods of time, and that there will be reasonable limits upon how long an employee can work in any given day. After solving the general problem, we hope to be able to explore these more concrete issues to provide specific guidance to management about how best to perform day-to-day scheduling operations.

We expect that our references will include materials posted on eClass, the recommended (optional) text book, Operations Research Principles and Practice by Pradeep Pai, and perhaps other sources. All references will be properly documented in the bibliography of our report.

On the surface, our problem appears to be a fairly-typical linear programming problem. We intend to follow the methods presented in class, with the assistance of computer algebra programs such as Maple, Matlab, Python, R, or others. Our final report will be typeset using L<sup>A</sup>T<sub>E</sub>X. We have set up a GitHub repository for our project deliverables at [https://github.com/colefichter/math372\\_project\\_1](https://github.com/colefichter/math372_project_1) to facilitate distributed collaboration.