

Guidelines on the Course Project

For the course project, you can choose one of the following options:

Option 1: Critical appraisal of an article in the area of medical decision making.

- There is a book chapter called “Critical Assessment of Economic Evaluation” that describes how this critical appraisal will be performed. Use the checklist (Box 3.1) in this chapter as a guide while preparing your project. This chapter is uploaded to the website.
- There is also an example appraisal at the end of the chapter. The example is the critical appraisal of an article and you can reach this example article from the course website (Note that this is just an example article, not the one that you will use for your project!)
- Articles with verbal discussion only are not appropriate. Preferably, the article will have a decision tree and use tools such as Markov cohort and/or Monte Carlo simulation.

Option 2: Repeating the analysis performed in an article using OR tools in healthcare.

- In this option, you will find an article discussing an OR application in health that involves mathematical modeling.
- You are expected to repeat the analysis performed in the article.
- If the model is too complicated, you can make simplifying assumptions and/or solve smaller instances of the problem discussed. (For example, if the article considers a hospital location setting and solves it for a network with 100 nodes, you may solve it for a problem instance with only 20 nodes.)
- You may solve the model using any solver/platform that you prefer (MATLAB, Java-CPLEX, CPLEX Optimization Studio, Xpress etc.).

The project can be done in groups of at most 3 people. You will pick the articles yourself. Please form your group, choose the option and choose three articles (article 1 should be your most preferred article) and e-mail the names of the group members and the names of the articles to your teaching assistant Tuğba Denktas (tugba.denktas@bilkent.edu.tr) by March 12. I will then check the articles and assign one of your chosen articles to you or request a change of the selection (each group should work on a different article, in case multiple groups choose the same three articles the assignments will be made on a first-come, first-served basis).

Some websites that can be used to find the articles are as follows:

<http://www.scopus.com/>

www.webofknowledge.com

Outputs: You are expected to prepare a report (not exceeding 3 pages¹) and a presentation of maximum 10 minutes. The presentation is expected to be a summary of your report.

Deadline: The deadline for the reports is **April 30th**. The presentations will take place in the last 2 weeks of the semester. The exact schedule of the presentations will be announced later.

¹ A4, 12pt., 1.5 spacing