An introduction to fair division and cake-cutting algorithms Reference

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There are two very good books on the subject of fair division.

- *Cake-cutting algorithms: be fair if you can* by Jack Robertson and William Webb

- *Fair division from cake-cutting to dispute resolution* by Steven J. Brams and Alan D. Taylor

The Robertson and Webb book gives a extensive and friendly survey to the topics in fair division. We will cover the materials in its first six chapters. [footnote: pretty ambitious goal]. The Brams and Taylor book takes a broader view by addressing historical development of the field and detailing its application in social and political science.

For a quick introduction to graph theory, try

- *A walk through combinatorics* by Miklos Bona [Part III]

For learning mathematical notations and terminology used in this class, check out

- *An introduction to abstract mathematics* by Robert J. Bond and William J. Keane