Each 6.1800 lecture will come with an outline. You can fill this in during lecture, after lecture, or not at all — it's entirely up to you how you use it. The goal of these outlines is to help you understand the main points that you should be taking away from each lecture. In some cases we will also include examples of things you should be able to do after each lecture.

In the past, these outlines have proved to be an effective tool for studying for the exams. Note that the outlines are ***not exhaustive****; there will be topics and nuances in lecture that aren't captured by the outline.*

Lecture 10: BGP

- What is an autonomous system (AS)?
- There are three components that contribute to scalable routing on the internet: a hierarchy of routing, path-vector routing, and topological addressing. What do we mean by each, and how does each improve scalability?
- What is policy routing? Why do certain Internet stakeholders (e.g., ISPs) want it?
- What do the different AS relationships imply?
    - Customer-provider
    - Peering
- Why would two ISPs ever peer with each other?
- What is an "export policy"?
    - What export policies are used in a customer/provider relationship?
    - What export policies are used in a peering relationship?
    - *You should be able to look at an AS graph like the ones in lecture and determine what routes get advertised and to whom*
- What is an "import policy"?
    - How do ASes decide which route to import to a particular destination?
- How does BGP handle failures?
- What are some challenges facing BGP today? (There are a few)