## Class 15

Routing

- Routing protocols are rules that dictate the path messages will follow to get to their fina; destinations.

## Interior vs. Exterior Routing Protocols

- Protocols that communicate within a single AS are called Interior gateway protocols. Protocols that communicate between different AS's are called exterior gateway protocols.

## Interior Gateway Protocols:

- Routing Information Protocol (RIP) [Historical]
- Open Shortest Path First (OSPF)
- Intermediate System to Intermediate System (IS-IS)

## Exterior Gateway Protocols:

- Border Gateway Protocol (BGP)

Peering agreement allows data to flow freely between two AS.

## Transit relationship: paying for transport.

Dijkstras shortest path algorithm may be efficient but it is not the one used for routing. We use bellman fords shortest path algorithm because unlike dijkstras, bellman ford can compute shortest path without knowing the start and end destinations.