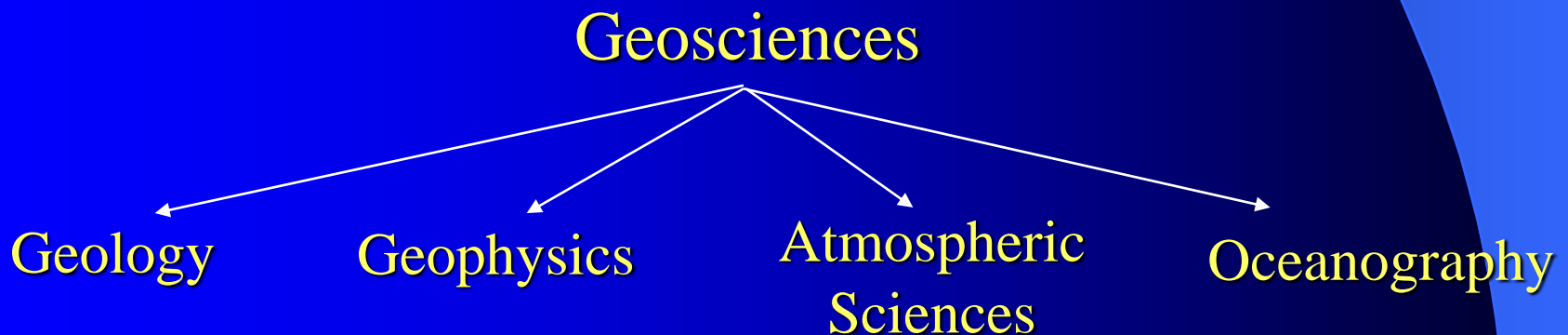


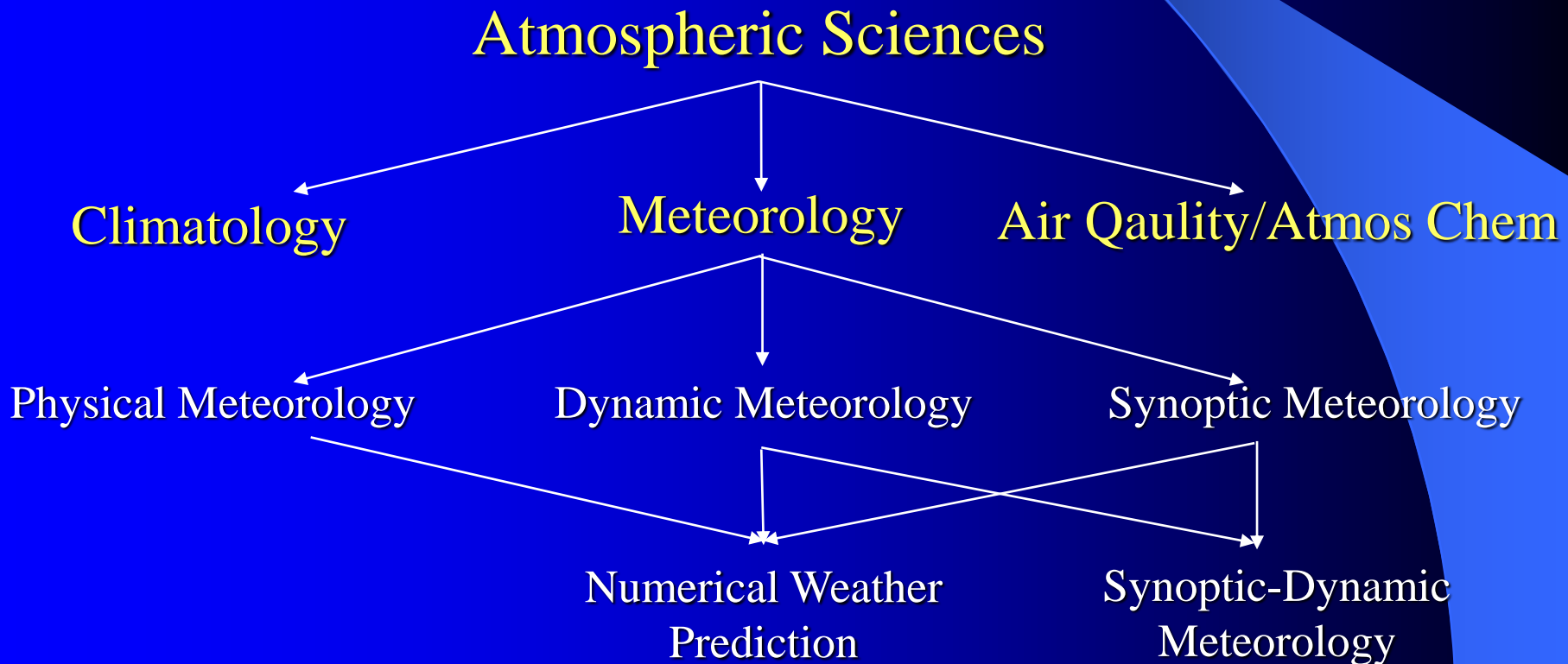
Geoscience Career Development

- Geoscience (also called Earth Science) is the study of Earth.
- Geoscience includes so much more than rocks and volcanoes, it studies the processes that form and shape Earth's surface, the natural resources we use, and how water and ecosystems are interconnected. (U.S. Geological Survey)
- In fact, Geosciences may be extended to other planets, such as planetary atmosphere, etc. In today's talk, we'll focus on Atmospheric Sciences.



Atmospheric Science Career Development

- To understand the AS job options, one needs to understand the scope of the AS.



Career Track 1: Meteorology

- Meteorologist for the National Weather Service
 - Broadcast meteorology
 - Graduate school for future research jobs
 - Research positions at NOAA, NASA, DoE, DoD, EPA, USDA, State Governments
 - NASA atmospheric scientists, who also study, measure, and simulate planetary atmospheres.
 - Weather modeler, analyst, or forecaster for industry, commerce, airlines, government, alternative energy companies
 - Military weather officer (Air Force, Navy, NOAA Corp, etc.)
 - Private weather prediction firms
 - Airline Meteorologists
 - Renewable Energy Siting and Forecasting
- * Do your own search on AMS Career Guide for AS positions.

Career Track 2: Climatology

- Graduate school for future research jobs
- Analyst and modeling for environmental impact studies
- Climate Positions in State and Local Governments (many have sustainability positions, climate positions)
- Climate/weather derivatives — taking seasonal prediction information and using it for business
- Climate observations/monitoring - jobs with NASA, USGS, NOAA; jobs related to climate changes
- Reinsurance industry (risk management for natural disasters)
- Alternative energy companies (e.g., wind power, solar power analysis)

Career Track 3: Air Quality and Atmospheric Chemistry

- Graduate school for future research jobs
- Air Quality Forecasting and Monitoring for regional (e.g. Puget Sound Clean Air Agency), state (e.g. Department of Ecology Air Quality Program), and federal governments (e.g. EPA)
- Air Quality Consulting
- Environmental Consulting
- Analytical Instrumentation, sales, marketing, and R&D; there are small businesses that cater to air quality monitoring, but also opportunities at larger companies that are selling tools for Environmental Monitoring generally.
- Non-governmental Organizations (NGOs) – e.g. Clean Air Task Force

Additional Information on Careers in Atmospheric Sciences

- Try to do interns at NOAA, NWS, NASA, NCAR, DoD, EPA, etc. Note that some internships requires a 3.0 or higher GPA.
- NOAA: NOAA National Labs, NOAA Cis (Cooperative Institutes), & constructor co.
- NASA: NASA Centers, USRA, & contractor co.
- NWS: Try to do intern with a national or individual office. (NWS-RAH has established a voluntary internship with A&T)
- EPA: Try your own search, do not forget its HQ is in Triangle Park.
- DHS: We have several graduate and undergraduate students have joined faculty in their summer research teams.
- US Bureau of Labor Statistics on careers in Atmospheric Sciences
- UCAR Discovering Atmospheric Sciences – Careers
- Careers in Atmospheric Science (PhysicsToday)
- AMS Career Center
- Atmos Sci Undergrad Jobs Listserv
- Examples may be found on Mesolab.org (=> Fellowships & Jobs)

* Reference: Careers in Atmospheric Science, U. Washington