

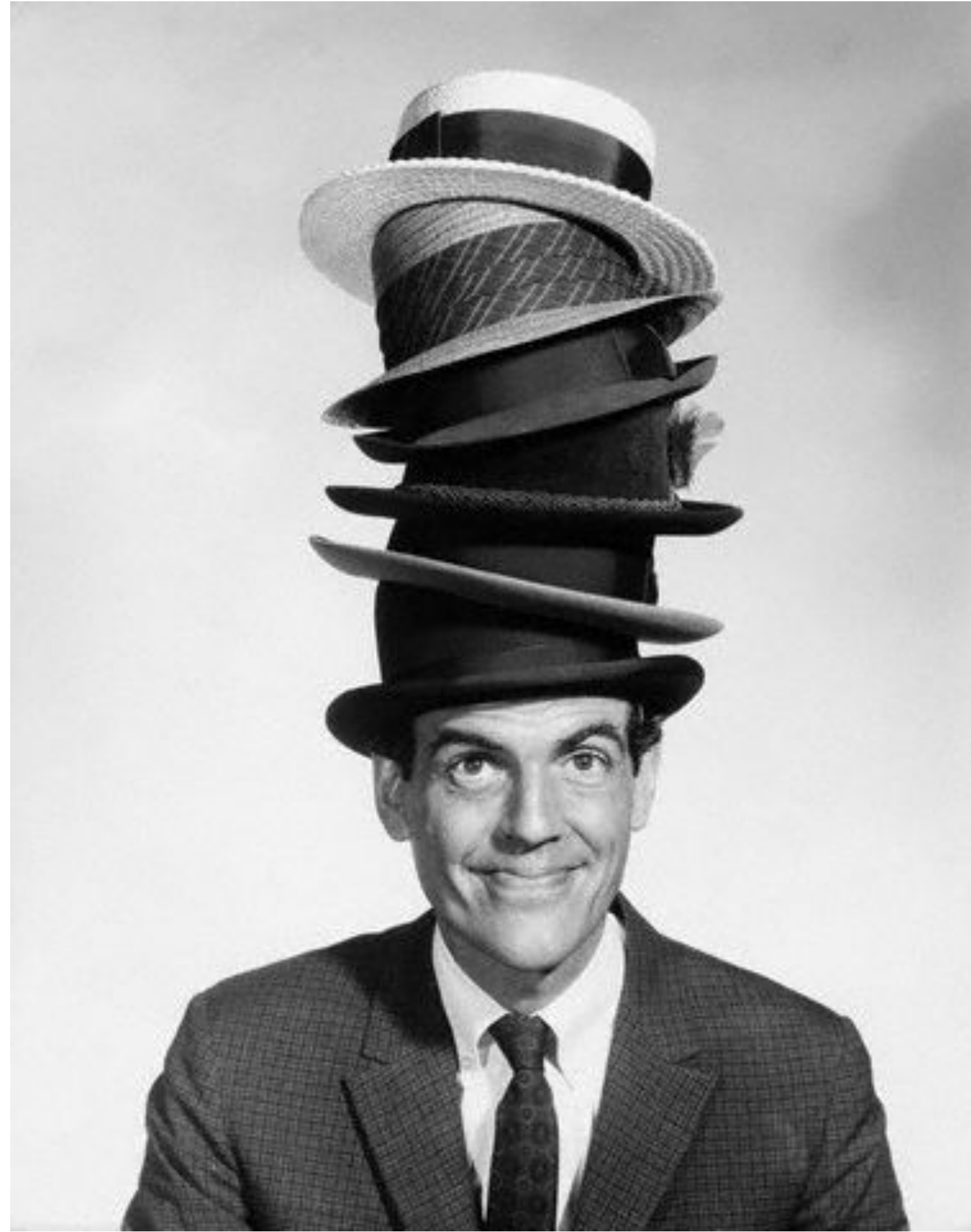
AST1501 - Introduction to Research

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The business of being a graduate student

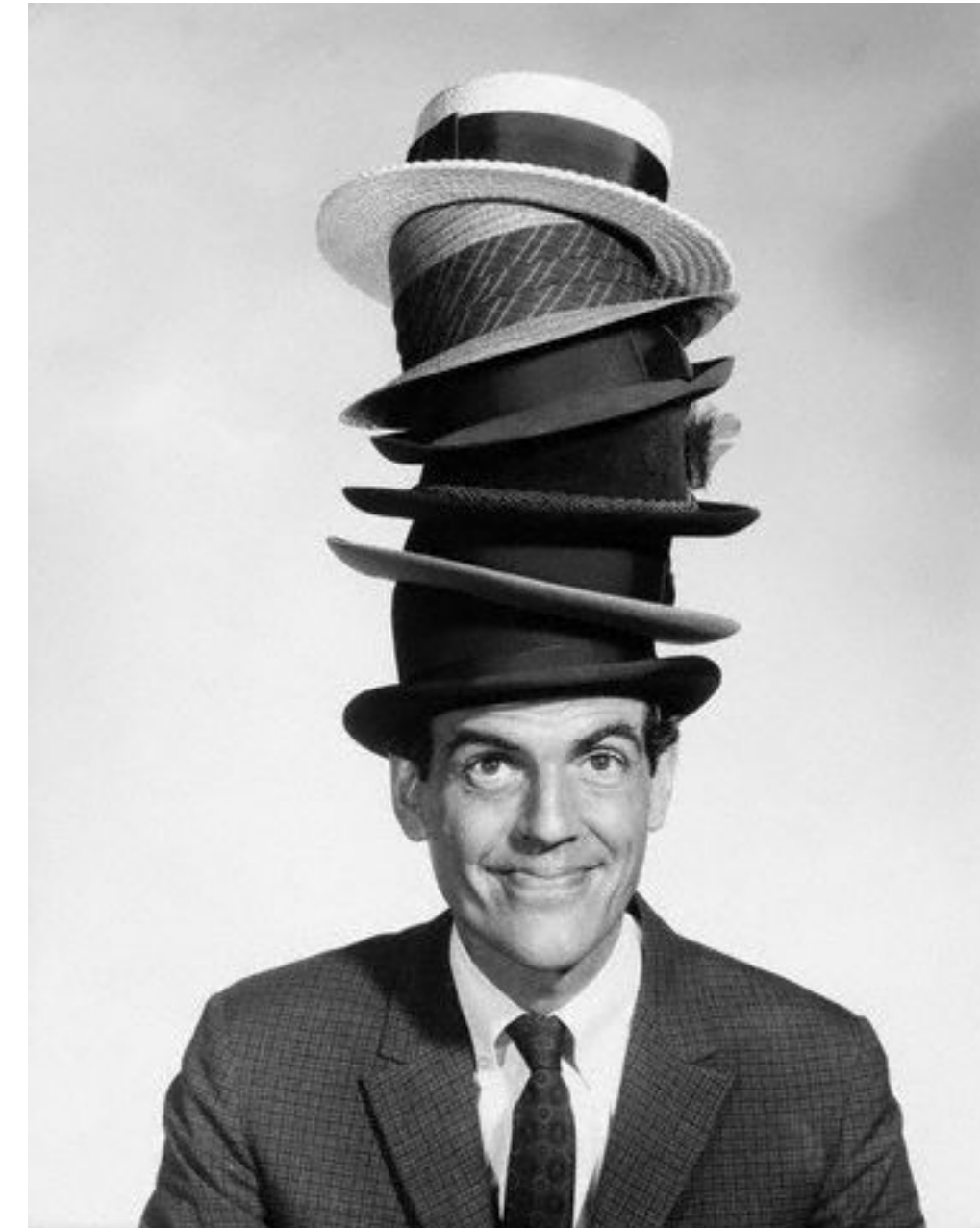
Overview

- The different hats you'll wear
- Time management
- Travel / time off
- Getting help



Different hats you'll wear as a graduate student

- Three main job responsibilities
 - Research
 - Teaching
 - Outreach, GASA/dept. governance
- Each of these might involve 'sub-hats', e.g.:
 - Research: your main research, supporting another student's research, co-supervising an undergraduate project, participating in observations, ...
 - Different outreach roles, some leading, some participating, ...



Responsibilities

- Different hats have different responsibilities:
 - Your thesis research: *you* are the main person responsible, set the pace, hit the milestones, ask for help from others
 - > lots of flexibility
 - Research you support: someone depending on you (to varying degree), often less important to you personally, but important to someone else!
 - > less direct responsibility, but often more urgent
 - TA: students / instructor(s) / other TAs: depend on you to do your job well and in a timely manner
 - > some flexibility, but many deadlines
 - Outreach, GASA: larger number of people depending on you, but responsibility depending a lot on role.
- Need time management to combine all parts of your job

Main research

- Pursuing your main research / thesis may seem like a single thing, but involves things like
 - Applying for funding: e.g., CGS-M, CGS-D, OGS, other awards
 - Writing proposals and updates: e.g., qualifier, committee meetings, observing and computing proposals
 - Sometimes pursuing two projects in parallel: e.g., starting on another project while finishing up one; planning / doing observations for next project
 - Applying to workshops and conferences: abstract submission, conference registration, travel booking, applying for travel funding, getting reimbursed
 - Eventually, applying for jobs
 - And doing the research itself!



Time management

- Previous discussion show need for time management
- Time management occurs on a hierarchy of levels:
 - Years: e.g., getting my PhD, working on large project X
 - O(Year): e.g., do research on Y and write paper, gain candidacy
 - O(months / term): research sub-goals, plan outreach event, attend conference
 - O(week): prepare TA session / mark homework, write committee report, prepare for supervisor meeting, fix issue Z in research, help student A to do B
 - Day: TA a session, attend group meeting, participate in astronomy on tap, go to colloquium and dinner



Plan your time and work reasonable hours

- Expectation is that you can do *all* your work in a 40 hr work week
- Some aspects of your job have a ~set number of hours:
 - TA: 70 hours / term —> ~6 hours / week for 12 term weeks (but can be arranged differently)
 - 1 course: ~ 8 hours, including class itself
- Most talks are ~1 hr, so something like 3 hours / week
- Most other parts of your job do *not* have such fixed hours, but it can be useful to try to set some yourself (e.g., “I will use 1 hour to do task Y”)
- If you feel like you don’t have enough time to do everything you have to / want to do, track your time for a while to see where it goes
- (Parts of) your schedule is (are) flexible: take advantage of this, but good to work similar hours every day / week

Plan high-level goals

And keep them in mind when planning short term

- Don't lose track of your overall goals when attending to the sometimes large number of tasks you have to every day
- Use it to prioritize and de-prioritize
- Prioritize urgent tasks and tasks that require input from others, but not to the detriment of all non-urgent tasks or all personal research
- Document progress on goals: great to see progress! And notes help you when you take a longer-than-expected break (write, write, write!)

Exercise: high-level planning

- Take a few minutes and write down:
 - A high-level goal you *have* to achieve this term
 - A high-level goal you *want* to achieve this term
- Then write down some ~month-long sub-goals for each high-level goal



Travel / time off

- Expected that you will take time off and that you will travel away from Toronto from time to time
- Time off includes:
 - Statutory holidays and University closures (End-of-year break)
 - 15 working days during the year
- Aside from TAing, your schedule is likely flexible, but discuss time off with supervisor
- Take advantage of the 15 days!



Travel / time off

Conference/workshop/hack week/... travel

- Students typically travel to a conference, workshop, or similar once or twice a year (less in earlier years, sometimes more)
- Normal part of your job that can be accommodated (e.g., TA)
- You should not be out money because of traveling for work, but will need to:
 - Discuss funding of trip with supervisor
 - Apply for travel funding (e.g., department's Research Travel Award, Dunlap Institute Training grant, SGS conference grant)
 - Pay most expenses yourself first and then get reimbursed
 - Travel economically
 - Keep all receipts
- You might be going to exciting places! Can combine work travel with personal travel, but need to (a) document that staying longer does not increase cost of travel and (b) pay for additional nights yourself.



Getting help

- In research, teaching, and departmental activities you will often run into a situation where you need help!
- Important to connect to the correct people
- Research: supervisor and group are first stop, but use the entire department as a resource as well (later on, PhD committee also big help)
- Departmental admin:
 - Grad program matters: Malaly Bakhtbolland or me
 - <https://www.astro.utoronto.ca/internal/whom-to-contact/>
- University also has resources for physical and mental health

